Regnest Nobel, Jarrell.

Access DB# 161320

SEARCH REQUEST FORM

Scientific and Technical Information Center

i	1,110 mg 11								
Art Unit:	e Number 30 206 ion: Ro	Examiner #: 74/4/Date: 8/2/05 22 Serial Number: 10/6/6, 950 esults Format Preferred (circle): PAPER DISK E-MAIL itize searches in order of need.							
Please provide a detailed statement of Include the elected species or structure utility of the invention. Define any ter known. Please attach a copy of the cov	the search topic, and describs, keywords, synonyms, actims that may have a special er sheet, pertinent claims, a	be as specifically as possible the subject matter to be searched, ronyms, and registry numbers, and combine with the concept or meaning. Give examples or relevant citations, authors, etc. if and abstract.							
Title of Lovention: Fun	gicidal a	lsc							
Title of Invention: Function inventors (please provide full names)	Markus	Gewehr et al							
Earliest Priority Filing Date: 6	0/394,93	2 7/11/2002							
		n (parent, child, divisional, or issued patent numbers) along with the							
approprime serial number.		, , , , , , , , , , , , , , , , , , , ,							
formula controlle herpotro cho 1 - 5 (Search for	ordes chordes or A+ Ha joners see att	for the compd of l, and method of do cercosporella in crop plants logen at any position to cached sheet							
**************************************	*******	*******							
TAFF USE ONLY Noble	Type of Search	Vendors and cost where applicable							
archer Phone #:	NA Sequence (#)	STN							
	AA Sequence (#)	Dialog							
archer Location:	Structure (#)	Questel/Orbit							
ite Searcher Pieked Up;	Bibliographic V	Dr.Link							
	Litigation	l.exis/Nexis							
ercher Prej Review Time: 12	Fulltext	Sequence Systems							
al Prep :- Patent Family WWW/Internet									

=> d his

(FILE 'HOME' ENTERED AT 07:20:00 ON 23 AUG 2005)

FILE 'HCAPLUS' ENTERED AT 07:20:06 ON 23 AUG 2005 L1 1 US2004063793/PN OR (US2003-616950# OR US2002-394932#)/AP,PRN

FILE 'REGISTRY' ENTERED AT 07:21:19 ON 23 AUG 2005

FILE 'HCAPLUS' ENTERED AT 07:21:19 ON 23 AUG 2005 L2 TRA L1 1- RN : 5 TERMS

FILE 'REGISTRY' ENTERED AT 07:21:19 ON 23 AUG 2005 L3 5 SEA L2

FILE 'WPIX' ENTERED AT 07:21:23 ON 23 AUG 2005 L4

=> b hcap FILE 'HCAPLUS' ENTERED AT 07:22:03 ON 23 AUG 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 23 Aug 2005 VOL 143 ISS 9 FILE LAST UPDATED: 22 Aug 2005 (20050822/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all l1 tot

```
L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
```

- AN 2004:60223 HCAPLUS
- DN 140:106945
- ED Entered STN: 26 Jan 2004
- TI Use of benzophenones as fungicides for controlling Pseudocercosporella herpotrichoides
- IN Gewehr, Markus; Rose, Ingo; Mueller, Bernd; Ammermann, Eberhard; Orth, Ann; Van Tuyl Cotter, Henry
- PA BASF Aktiengesellschaft, Germany
- SO PCT Int. Appl., 17 pp.

CODEN: PIXXD2

- DT Patent
- LA German
- IC ICM A01N035-04
- CC 5-2 (Agrochemical Bioregulators)

FAN.CNT 1

APPLICATION NO. DATE PATENT NO. DATE KIND ---------_ _ _ _ ----------WO 2003-EP7255 20030707 <--ΡI WO 2004006675 A1 20040122 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

```
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                               20040122
                                           CA 2003-2491408
                                                                  20030707 <--
    CA 2491408
                         AA
                                           BR 2003-11981
    BR 2003011981
                         Α
                               20050322
                                                                  20030707 <--
                               20050420
                                           EP 2003-763730
                                                                  20030707 <--
    EP 1523238
                         A1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    US 2004063793
                         A1
                               20040401
                                         US 2003-616950
                                                                  20030711 <--
PRAI US 2002-394932P
                         Ρ
                               20020711
                         W
                               20030707
    WO 2003-EP7255
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
PATENT NO.
                       .....
 _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
                ----
WO 2004006675
                       A01N035-04
                TCM
                ECLA
                       A01N035/04
WO 2004006675
                NCL
                       514/689.000
US 2004063793
                ECLA
                       A01N035/04
                                                                           <--
OS
    MARPAT 140:106945
GI
```

- AB Benzophenones (I, R = H or C1-C4 alkyl; X = F, C1, Br) are useful as fungicides for controlling Pseudocercosporella herpotrichoides in cultivated plants. Thus, the incidence of eyespot disease in wheat inoculated with P. herpotrichoides was 0-25% when plants had been treated with 63 ppm I (R = Me or H; X = Br or C1), whereas 100% of untreated plants were infected.
- ST benzophenone fungicide Pseudocercosporella control
- IT Fungicides

Hordeum vulgare

Oculimacula yallundae

(benzophenones as fungicides for controlling Pseudocercosporella herpotrichoides in crops)

IT Triticum aestivum

(disease, eyespot; benzophenones as fungicides for controlling Pseudocercosporella herpotrichoides in crops)

IT 220899-03-6 220900-12-9 252955-10-5 252955-12-7

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(as fungicide for controlling Pseudocercosporella herpotrichoides in crops)

IT 252955-11-6D, derivs.

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(as fungicides for controlling Pseudocercosporella herpotrichoides in crops)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) American Cyanamid Co; EP 0897904 A 1999 HCAPLUS
- (2) American Cyanamid Co; EP 1023835 A 2000 HCAPLUS
- (3) Leadbitter, N; WO 0180643 A 2001 HCAPLUS
- (4) Novartis Erfind Verwalt Gmbh; WO 0072677 A 2000 HCAPLUS

=> b reg;d ide 13 tot FILE 'REGISTRY' ENTERED AT 07:22:14 ON 23 AUG 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 22 AUG 2005 HIGHEST RN 861291-85-2 DICTIONARY FILE UPDATES: 22 AUG 2005 HIGHEST RN 861291-85-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

- L3 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 252955-12-7 REGISTRY
- ED Entered STN: 17 Jan 2000
- CN Methanone, (3-chloro-6-hydroxy-2-methylphenyl) (2,3,4-trimethoxy-6-methylphenyl) (9CI) (CA INDEX NAME)
- OTHER NAMES:
- CN 1-(3-Chloro-6-hydroxy-2-methylphenyl)-1-(2,3,4-trimethoxy-6-methylphenyl)methanone
- FS 3D CONCORD
- MF C18 H19 Cl O5
- CI COM
- SR CA
- LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE) 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 2 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN L3

252955-11-6 REGISTRY RN

Entered STN: 17 Jan 2000 ED

Methanone, (2-hydroxy-6-methylphenyl)(2,3,4-trimethoxy-6-methylphenyl)-

(9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C18 H20 O5

SR CA

STN Files: CA, CAPLUS, USPATFULL LC

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- ANSWER 3 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN L3
- RN252955-10-5 REGISTRY
- ED Entered STN: 17 Jan 2000
- Methanone, (3-bromo-6-hydroxy-2-methylphenyl)(2,3,4-trimethoxy-6-CN methylphenyl) - (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- C18 H19 Br O5 MF
- CI COM
- SR CA
- STN Files: CA, CAPLUS, USPATFULL LC

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L3 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 220900-12-9 REGISTRY
- ED Entered STN: 01 Apr 1999
- CN Methanone, (3-chloro-6-methoxy-2-methylphenyl) (2,3,4-trimethoxy-6-
- methylphenyl) (9CI) (CA INDEX NAME)
- FS 3D CONCORD
- MF C19 H21 Cl O5
- CI COM
- SR CA
- LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L3 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 220899-03-6 REGISTRY
- ED Entered STN: 01 Apr 1999
- CN Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6methylphenyl)- (9CI) (CA INDEX NAME)

OTHER NAMES:

- CN Metrafenone
- FS 3D CONCORD
- MF C19 H21 Br O5
- CI COM
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, CBNB, TOXCENTER, USPATZ, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 21 REFERENCES IN FILE CA (1907 TO DATE)
- 7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 21 REFERENCES IN FILE CAPLUS (1907 TO DATE)

...

```
=> b wpix
```

```
FILE 'WPIX' ENTERED AT 07:22:16 ON 23 AUG 2005 COPYRIGHT (C) 2005 THE THOMSON CORPORATION
```

FILE LAST UPDATED: 18 AUG 2005 <20050818/UP>
MOST RECENT DERWENT UPDATE: 200553 <200553/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

- >>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE http://thomsonderwent.com/coverage/latestupdates/ <<<
- >>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER GUIDES, PLEASE VISIT: http://thomsonderwent.com/support/userguides/
- >>> NEW! FAST-ALERTING ACCESS TO NEWLY-PUBLISHED PATENT
 DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
 FIRST VIEW FILE WPIFV.
 FOR FURTHER DETAILS: http://www.thomsonderwent.com/dwpifv <<<
- >>> THE CPI AND EPI MANUAL CODES HAVE BEEN REVISED FROM UPDATE 200501. PLEASE CHECK:
- http://thomsonderwent.com/support/dwpiref/reftools/classification/code-revision/ FOR DETAILS. <<<
- 'BIX BI, ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE
- => d all 14 tot
- L4 ANSWER 1 OF 1 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
- AN 2004-143018 [14] WPIX
- DNC C2004-057621
- TI Controlling Pseudocercosporella herpotrichoides in crop plants, especially wheat or barley, comprises use of hepta-substituted benzophenone derivatives.
- DC CO
- IN AMMERMANN, E; COTTER, H V T; GEWEHR, M; MULLER, B; ORTH, A; ROSE, I; MUELLER, B; VAN TUYL COTTER, H
- PA (AMME-I) AMMERMANN E; (COTT-I) COTTER H V T; (GEWE-I) GEWEHR M; (MULL-I)
 MULLER B; (ORTH-I) ORTH A; (ROSE-I) ROSE I; (BADI) BASF AG
- CYC 106
- PI WO 2004006675 A1 20040122 (200414)* GE 17 A01N035-04
 - RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
 - W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
 - US 2004063793 A1 20040401 (200425) A01N035-00 <-AU 2003250897 A1 20040202 (200450) A01N035-04
 BR 2003011981 A 20050322 (200522) A01N035-04
 EP 1523238 A1 20050420 (200527) GE A01N035-04
 - R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR
- ADT WO 2004006675 A1 WO 2003-EP7255 20030707; US 2004063793 A1 Provisional US 2002-394932P 20020711, US 2003-616950 20030711; AU 2003250897 A1 AU 2003-250897 20030707; BR 2003011981 A BR 2003-11981 20030707; EP 1523238 A1 EP 2003-763730 20030707, WO 2003-EP7255 20030707
- FDT AU 2003250897 A1 Based on WO 2004006675; BR 2003011981 A Based on WO 2004006675; EP 1523238 A1 Based on WO 2004006675

```
PRAI US 2002-394932P
                          20020711; US 2003-616950
     20030711
     ICM A01N035-00; A01N035-04
AΒ
     WO2004006675 A UPAB: 20040226
     NOVELTY - The use of 2',6-dimethyl-5-halo-2,4',5',6'-tetramethoxy- or
     2-hydroxy-4',5',6'-trimethoxy-benzophenones (I) for controlling
     Pseudocercosporella herpotrichoides in crop plants is new.
          DETAILED DESCRIPTION - The use of 2',6-dimethyl-5-halo-2,4',5',6'-
     tetramethoxy- or 2-hydroxy-4',5',6'-trimethoxy-benzophenones of formula
     (I) for controlling Pseudocercosporella herpotrichoides in crop plants is
     new.
            = H or 1-4C alkyl; and
         Hal = F, Cl or Br.
          ACTIVITY - Fungicide.
          In tests with wheat seedlings, pre-treatment with
     5-bromo-2',6-dimethyl-2,4',5',6'-tetramethoxy-benzophenone (Ia) at a
     concentration of 63 ppm before contact with Pseudocercosporella
     herpotrichoides spores reduced the degree of infection 40 days later from
     100% (in untreated controls) to 0-25%.
          MECHANISM OF ACTION - None given in the source material.
          USE - Especially for controlling Pseudocercosporella herpotrichoides
     in wheat or barley (claimed).
         ADVANTAGE - The known fungicides (I) (described in EP727141-A,
     EP897141-A and EP967196-A) have been found to show excellent activity
     against Pseudocercosporella herpotrichoides
     Dwg.0/0
FS
     CPI
FA
    AB; GI; DCN
     CPI: C10-E02; C10-F02; C14-A04
MC
=> b home
FILE 'HOME' ENTERED AT 07:22:24 ON 23 AUG 2005
```

=> b reg
FILE 'REGISTRY' ENTERED AT 08:01:00 ON 23 AUG 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 22 AUG 2005 HIGHEST RN 861291-85-2 DICTIONARY FILE UPDATES: 22 AUG 2005 HIGHEST RN 861291-85-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d ide 110 tot

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN 220899-03-6 REGISTRY

ED Entered STN: 01 Apr 1999

CN Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6methylphenyl)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Metrafenone

FS 3D CONCORD

MF C19 H21 Br O5

CI COM

SR CA

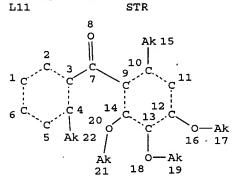
LC STN Files: CA, CAPLUS, CASREACT, CBNB, TOXCENTER, USPAT2, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

21 REFERENCES IN FILE CA (1907 TO DATE)

7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 21 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d que sta l16

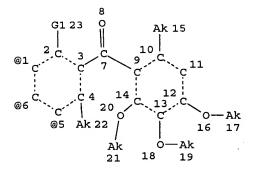


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L13 204 SEA FILE=REGISTRY SSS FUL L11 L14 STR



O—Ak G2—X @24 25 26 27

VAR G1=OH/24 VAR G2=1/5/6 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE L16 128 SEA FILE=REGISTRY SUB=L13 SSS FUL L14

100.0% PROCESSED 204 ITERATIONS 128 ANSWERS SEARCH TIME: 00.00.01

=> d que sta l19 L11 STR

1,7

NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

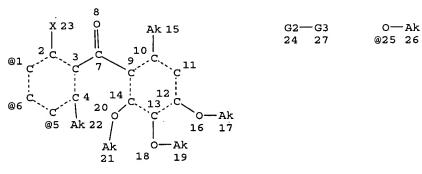
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

204 SEA FILE=REGISTRY SSS FUL L11 L13

L17



VAR G2=1/5/6VAR G3=OH/25 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE

O SEA FILE=REGISTRY SUB=L13 SSS FUL L17

O ANSWERS 204 ITERATIONS 100.0% PROCESSED SEARCH TIME: 00.00.01

=> d his full

(FILE 'HOME' ENTERED AT 07:20:00 ON 23 AUG 2005)

FILE 'HCAPLUS' ENTERED AT 07:20:06 ON 23 AUG 2005 1 SEA ABB=ON PLU=ON US2004063793/PN OR (US2003-616950# OR L1 US2002-394932#)/AP,PRN

```
FILE 'REGISTRY' ENTERED AT 07:21:19 ON 23 AUG 2005
     FILE 'HCAPLUS' ENTERED AT 07:21:19 ON 23 AUG 2005
L_2
                TRA L1 1- RN :
                                       5 TERMS
     FILE 'REGISTRY' ENTERED AT 07:21:19 ON 23 AUG 2005
L3
              5 SEA ABB=ON PLU=ON L2
     FILE 'WPIX' ENTERED AT 07:21:23 ON 23 AUG 2005
              1 SEA ABB=ON PLU=ON US2004063793/PN OR (US2003-616950# OR
                US2002-394932#)/AP,PRN
     FILE 'REGISTRY' ENTERED AT 07:39:23 ON 23 AUG 2005
            138 SEA ABB=ON PLU=ON C19H21BRO5
L5
            123 SEA ABB=ON PLU=ON L5 AND 46.150.18/RID
L6
L7 .
                QUE ABB=ON PLU=ON (PMS OR MAN OR IDS)/CI OR COMPD OR
                COMPOUND OR UNSPECIFIED OR (D OR T)/ELS
            121 SEA ABB=ON PLU=ON L6 NOT L7
25 SEA ABB=ON PLU=ON L8 NOT (MXS/CI OR MIXT)
L8
L9
             1 SEA ABB=ON PLU=ON 220899-03-6/BI AND L9
T-10
                STR
L11
            11 SEA SSS SAM L11
L12
            204 SEA SSS FUL L11
L13
                SAV TEM L13 QAZI950F0/A
                STR L11
L14
L15
             7 SEA SUB=L13 SSS SAM L14
            128 SEA SUB=L13 SSS FUL L14
L16
                SAV TEM QAZI950S0/A L16
                STR L11
L17
L18
              0 SEA SUB=L13 SSS SAM L17
              O SEA SUB=L13 SSS FUL L17
L19
     FILE 'HCAPLUS' ENTERED AT 08:02:17 ON 23 AUG 2005
             21 SEA ABB=ON PLU=ON L10
L20
             11 SEA ABB=ON PLU=ON METRAFENON# 40 SEA ABB=ON PLU=ON L16
L21
L22
                E FUNGICIDES/CT
                E E3+ALL
                E E6
                E E3+ALL
                QUE ABB=ON PLU=ON BIOCIDES+NT/CT
L23
                E BARLEY/CT
                E E3+ALL
                E E2+ALL
                QUE ABB=ON PLU=ON HORDEUM VULGARE+OLD, NT/CT
L24
                E WHEAT/CT
                E E3
                E E3+ALL
                E E2
                E E3+ALL
                QUE ABB=ON PLU=ON TRITICUM AESTIVUM+OLD, NT/CT
T-25
                E OCULIMACULA/CT
                E E3+ALL
            403 SEA ABB=ON PLU=ON OCULIMACULA+NT/CT
1,26
            267 SEA ABB=ON PLU=ON (PSEUDOCERCOSPOR? OR P) (1A) HERPOTRICHOID?
L27
     FILE 'HCAOLD' ENTERED AT 08:07:46 ON 23 AUG 2005
              0 SEA ABB=ON PLU=ON L10
L28
              O SEA ABB=ON PLU=ON L16
L29
     FILE 'HCAPLUS' ENTERED AT 08:07:57 ON 23 AUG 2005
                E GEWEHR M/AU
             81 SEA ABB=ON PLU=ON "GEWEHR MARKUS"/AU
L30
                E ROSE I/AU
             39 SEA ABB=ON PLU=ON ("ROSE I"/AU OR "ROSE I A"/AU OR "ROSE I
L31
                C"/AU OR "ROSE I D G"/AU OR "ROSE I S"/AU OR "ROSE I W"/AU)
```

```
E ROSE INGO/AU
L32
             43 SEA ABB=ON PLU=ON ("ROSE INGO"/AU OR "ROSE INGO C"/AU)
                E MULLER B/AU
            320 SEA ABB=ON PLU=ON ("MULLER B"/AU OR "MULLER B A"/AU OR
L33
                "MULLER B D"/AU OR "MULLER B G"/AU OR "MULLER B H"/AU OR
                "MULLER B K M"/AU OR "MULLER B L"/AU OR "MULLER B P"/AU OR
                "MULLER B R"/AU OR "MULLER B U"/AU OR "MULLER B V"/AU OR
                "MULLER B W"/AU)
                E MULLER BERND/AU
            201 SEA ABB=ON PLU=ON ("MULLER BERND"/AU OR "MULLER BERND HENRIK
L34
                DR DIPL PH"/AU OR "MULLER BERND R"/AU OR "MULLER BERND W"/AU
                OR "MULLER BERND WILLI WERNER"/AU OR "MULLER BERNDT"/AU OR
                "MULLER BERNDT M"/AU)
                E MUELLER BERND/AU
            760 SEA ABB=ON PLU=ON ("MUELLER BERND"/AU OR "MUELLER BERND
L35
                CHRISTIAN"/AU OR "MUELLER BERND F"/AU OR "MUELLER BERND G"/AU
                OR "MUELLER BERND HENRIK"/AU OR "MUELLER BERND M"/AU OR
                "MUELLER BERND R"/AU OR "MUELLER BERND UDO"/AU OR "MUELLER
                BERND VOLKER"/AU OR "MUELLER BERND W"/AU OR "MUELLER BERND W
                M"/AU OR "MUELLER BERND WILLI WERNER"/AU OR "MUELLER BERNDT"/AU
                E MUELLER B/AU
L36
            897 SEA ABB=ON PLU=ON ("MUELLER B"/AU OR "MUELLER B A"/AU OR
                "MUELLER B E"/AU OR "MUELLER B E A"/AU OR "MUELLER B F"/AU OR
                "MUELLER B G"/AU OR "MUELLER B H"/AU OR "MUELLER B J"/AU OR
                "MUELLER B K"/AU OR "MUELLER B L"/AU OR "MUELLER B M"/AU OR
                "MUELLER B R"/AU OR "MUELLER B U"/AU OR "MUELLER B W"/AU)
                E ORTH A/AU
              0 SEA ABB=ON PLU=ON E3-6,10-13
L37
                E VAN TUYL COTTER/AU
             15 SEA ABB=ON PLU=ON "VAN TUYL COTTER HENRY"/AU
L38
                E VAN TUYL/AU
          28102 SEA ABB=ON PLU=ON BASF/CS,PA
QUE ABB=ON PLU=ON PY<=2002 OR AY<=2002 OR PRY<=2002 OR
L39
L40
                PD<20020711 OR AD<20020711 OR PRD<20020711
             27 SEA ABB=ON PLU=ON (L20 OR L21 OR L22) AND (L30 OR L31 OR L32
L41
                OR L33 OR L34 OR L35 OR L36 OR L37 OR L38 OR L39)
             24 SEA ABB=ON PLU=ON L41 AND L23
L42
             1 SEA ABB=ON PLU=ON L42 AND (L26 OR L27)
1 SEA ABB=ON PLU=ON L42 AND (L24 OR L25)
1 SEA ABB=ON PLU=ON (L43 OR L44)
L43
L44
L45
             13 SEA ABB=ON PLU=ON (L20 OR L21 OR L22) NOT L41
L46 ·
              1 SEA ABB=ON PLU=ON L46 AND (L24 OR L25 OR L26 OR L27)
L47
             12 SEA ABB=ON PLU=ON L23 AND L46
L48
                D SCA L47
              1 SEA ABB=ON PLU=ON L47 AND L48
L49
                D KWIC
             12 SEA ABB=ON PLU=ON (L48 OR L49)
L50
     FILE 'AGRICOLA' ENTERED AT 08:16:03 ON 23 AUG 2005
L51
              O SEA ABB=ON PLU=ON (L20 OR L21 OR L22)
     FILE 'CABA' ENTERED AT 08:16:17 ON 23 AUG 2005
              2 SEA ABB=ON PLU=ON (L20 OR L21 OR L22)
L52
     FILE 'USPATFULL, USPAT2' ENTERED AT 08:17:50 ON 23 AUG 2005
             35 SEA ABB=ON PLU=ON (L20 OR L22)
3 SEA ABB=ON PLU=ON METRAFENON#/TI,IT,AB,CLM
L53
L54
                D SCA
                D BIB TOT
             35 SEA ABB=ON PLU=ON (L53 OR L54)
L55
                E GEWEHR M/AU
L56
             39 SEA ABB=ON PLU=ON "GEWEHR MARKUS"/AU
                E ROSE I/AU
             36 SEA ABB=ON PLU=ON "ROSE INGO"/AU
L57
                E MULLER B/AU
```

```
194 SEA ABB=ON PLU=ON ("MULLER BERND"/AU OR "MULLER BERND
L58
                HENRIK"/AU OR "MULLER BERND W"/AU OR "MULLER BERND W W"/AU)
                E MUELLER B/AU
             56 SEA ABB=ON PLU=ON ("MUELLER BERND"/AU OR "MUELLER BERND
L59
                MICHAEL"/AU)
                E AMMERMAN E/AU
                E AMMERMANN E/AU
            474 SEA ABB=ON PLU=ON "AMMERMANN EBERHARD"/AU
L60
                E ORTH A/AU
              5 SEA ABB=ON PLU=ON ("ORTH ANN"/AU OR "ORTH ANN B"/AU)
L61
               E COTTER H/AU
             23 SEA ABB=ON PLU=ON "COTTER HENRY VAN TUYL"/AU
L62
               E VAN TUYL/AU
              6 SEA ABB=ON PLU=ON "VAN TUYL COTTER HENRY"/AU
L63
         12365 SEA ABB=ON PLU=ON BASF/CS, PA
L64
             28 SEA ABB=ON PLU=ON L55 AND (L56 OR L57 OR L58 OR L59 OR L60
L65
               OR L61 OR L62 OR L63 OR L64)
             1 SEA ABB=ON PLU=ON ((PSEUDOCERCOSPOR? OR P)(1A) HERPOTRICHOID?
L66
               )/TI,IT,AB,CLM AND L65
              7 SEA ABB=ON PLU=ON L55 NOT L65
1.67
              O SEA ABB=ON PLU=ON L67 AND ((PSEUDOCERCOSPOR? OR P) (1A)
L68
               HERPOTRICHOID?)/TI, IT, AB, CLM
     FILE 'HCAPLUS' ENTERED AT 08:25:49 ON 23 AUG 2005
               E COTTER H/AU
             16 SEA ABB=ON PLU=ON "COTTER HENRY VAN TUYL"/AU
L69
                E AMMERMANN E/AU
L70
            581 SEA ABB=ON PLU=ON
                                   ("AMMERMANN E"/AU OR "AMMERMANN EBERHARD"/A
                U OR "AMMERMANN EBERHARD DR"/AU)
             14 SEA ABB=ON PLU=ON (L69 OR L70) AND (L20 OR L21 OR L22)
L71
L72
             1 SEA ABB=ON PLU=ON L71 AND (L26 OR L27)
             1 SEA ABB=ON PLU=ON (L45 OR L72)
L73
=> b hcap
```

FILE 'HCAPLUS' ENTERED AT 08:27:24 ON 23 AUG 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 23 Aug 2005 VOL 143 ISS 9 FILE LAST UPDATED: 22 Aug 2005 (20050822/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all fhitstr 173

```
L73 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN AN 2004:60223 HCAPLUS
DN 140:106945
ED Entered STN: 26 Jan 2004
TI Use of benzophenones as fungicides for controlling
```

Search done by Ross Schipe

```
Pseudocercosporella herpotrichoides
      Gewehr, Markus; Rose, Ingo; Mueller, Bernd;
IN
     Ammermann, Eberhard; Orth, Ann; Van Tuyl Cotter, Henry
PA
     BASF Aktiengesellschaft, Germany
     PCT Int. Appl., 17 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     German
IC
      ICM A01N035-04
CC
      5-2 (Agrochemical Bioregulators)
FAN.CNT 1
                                                                             DATE
     PATENT NO.
                            KIND
                                     DATE
                                                   APPLICATION NO.
                                     _ _ _ _ - - - - -
                                                   _____
                                                                             -----
      -------------
                             ----
                                                  WO 2003-EP7255
                                                                             20030707
PΙ
     WO 2004006675
                             A1
                                     20040122
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
               LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
               PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
               TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
              KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                     20040122
                                                   CA 2003-2491408
                                                                             20030707
     CA 2491408
                             AA
     BR 2003011981
                                     20050322
                                                   BR 2003-11981
                                                                             20030707
                             Α
                                     20050420
                                                  EP 2003-763730
                                                                             20030707
     EP 1523238
                             A1
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 2004063793
                                     20040401
                                                   US 2003-616950
                                                                             20030711
                             A1
PRAI US 2002-394932P
                             P
                                     20020711
     WO 2003-EP7255
                              W
                                     20030707
CLASS
                           PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                   CLASS
                           _____
                           A01N035-04
 WO 2004006675
                   ICM
 WO 2004006675
                   ECLA
                           A01N035/04
                           514/689.000
US 2004063793
                   NCL
                   ECLA
                           A01N035/04
     MARPAT 140:106945
OS
GI
```

- AB Benzophenones (I, R = H or C1-C4 alkyl; X = F, C1, Br) are useful as fungicides for controlling Pseudocercosporella herpotrichoides in cultivated plants. Thus, the incidence of eyespot disease in wheat inoculated with P. herpotrichoides was 0-25% when plants had been treated with 63 ppm I (R = Me or H; X = Br or C1), whereas 100% of untreated plants were infected.
- ST benzophenone fungicide Pseudocercosporella control

Ι

IT Fungicides

Hordeum vulgare Oculimacula yallundae (benzophenones as fungicides for controlling Pseudocercosporella herpotrichoides in crops)

IT Triticum aestivum

(disease, eyespot; benzophenones as fungicides for controlling Pseudocercosporella herpotrichoides in crops)

IT 220899-03-6 220900-12-9 252955-10-5

252955-12-7

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(as fungicide for controlling Pseudocercosporella

herpotrichoides in crops)

IT 252955-11-6D, derivs.

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(as fungicides for controlling Pseudocercosporella

herpotrichoides in crops)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) American Cyanamid Co; EP 0897904 A 1999 HCAPLUS
- (2) American Cyanamid Co; EP 1023835 A 2000 HCAPLUS
- (3) Leadbitter, N; WO 0180643 A 2001 HCAPLUS
- (4) Novartis Erfind Verwalt Gmbh; WO 0072677 A 2000 HCAPLUS
- IT 220899-03-6

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(as fungicide for controlling Pseudocercosporella

herpotrichoides in crops)

RN 220899-03-6 HCAPLUS

CN Methanone, (3-bromo-6-methoxy-2-methylphenyl) (2,3,4-trimethoxy-6-methylphenyl) - (9CI) (CA INDEX NAME)

=> d all hitstr 150 tot

L50 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:471844 HCAPLUS "

DN 143:28318

ED Entered STN: 03 Jun 2005

TI Micronized wood preservative formulations

IN Leach, Robert M.; Zhang, Jun

PA USA

OU.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 821,326. CODEN: USXXCO

DT Patent

LA English

IC ICM B32B021-02

ICS B32B021-10; A61K033-24; A61K033-34

INCL 424617000; 428292400; 424638000

CC 43-2 (Cellulose, Lignin, Paper, and Other Wood Products)

Section cross-reference(s): 5

FAN.CNT 2

t. LTA .	. CIVI Z				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΤ	US 2005118280	A1	20050602	US 2004-970446	20041021

```
20040409
                                20041223
                                            US 2004-821326
     US 2004258767
                          A1
                                20030409
PRAI US 2003-461547P
                          P
                                20031111
     US 2003-518994P
                         P
     US 2004-821326
                         A2
                                20040409
                                20040506
     US 2004-568485P
                          P
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
PATENT NO.
                        .....
 _____
                _ - - - -
US 2005118280 ICM B32B021-02
                 ICS
                       B32B021-10; A61K033-24; A61K033-34
                 INCL 424617000; 428292400; 424638000
                NCL
US 2005118280
                        424/617.000
US 2004258767
               NCL
                        424/630.000
    The wood preservative compns. comprising micronized particles. The composition
     comprises dispersions of micronized metal or metal compds. The wood
     preservative composition comprises an inorg. component comprising a metal or
     metal compound and organic biocide. When the composition comprises an inorg.
     component and an organic biocide, the inorg. component or the organic biocide or
     both are present as micronized particles. When used for preservation of
     wood, the micronized particles can be observed as uniformly distributed
     within the wood and there is minimal leaching of the metal and biocide
     from the wood.
     metal compd org biocide micronized wood preservative formulation
ST
     Quaternary ammonium compounds, uses
     RL: BUU (Biological use, unclassified); TEM (Technical or engineered
     material use); BIOL (Biological study); USES (Uses)
        (alkylbenzyldimethyl, chlorides; micronized wood preservative
        formulations comprising inorg. metal compds. and organic biocides)
     Polyoxyalkylenes, uses
IT
     RL: MOA (Modifier or additive use); USES (Uses)
        (amino-containing; micronized wood preservative formulations comprising
        inorg. metal compds. and organic biocides)
IT
        (lumber; micronized wood preservative formulations comprising inorg.
        metal compds. and organic biocides)
TT
     Biocides
      Fungicides
      Insecticides
     Microparticles
     Quassia
     Wood preservatives
        (micronized wood preservative formulations comprising inorg. metal
        compds. and organic biocides)
IT
     Cinerins
     Metals, uses
     Phosphines
      Pyrethrins
     Quaternary ammonium compounds, uses
     RL: BUU (Biological use, unclassified); TEM (Technical or engineered
     material use); BIOL (Biological study); USES (Uses)
        (micronized wood preservative formulations comprising inorg. metal
        compds. and organic biocides)
IT
     Wood
        (pine; micronized wood preservative formulations comprising inorg.
        metal compds. and organic biocides)
IT
     Amine oxides
     RL: MOA (Modifier or additive use); USES (Uses)
        (tertiary; micronized wood preservative formulations comprising inorg.
        metal compds. and organic biocides)
     50-00-0, Formaldehyde, uses 50-29-3, DDT, uses
                                                       50-29-3D, bromo derivs.
IT
     52-51-7, Bronopol 52-68-6, Trichlorfon 52-85-7, Famphur 54-11-5,
    Nicotine 54-64-8, Thiomersal 55-38-9, Fenthion 56-23-5, Carbon tetrachloride, uses 56-38-2, Parathion 56-72-4, Coumaphos 57-55 Mepronil 57-92-1, Streptomycin, uses 58-89-9, HCH 60-51-5,
     Dimethoate 60-57-1, Dieldrin 62-73-7, Dichlorvos 63-25-2, Carbaryl
     66-81-9, Cycloheximide 67-66-3, Chloroform, uses 70-38-2, Dimethrin
```

72-20-8, Endrin 72-43-5, 71-55-6, Methylchloroform 70-43-9, Barthrin Methoxychlor 72-54-8, TDE 74-83-9, Methyl bromide, uses 74-88-4, Iodomethane, uses 74-90-8, Hydrogen cyanide, uses 75-09-2, Methylene chloride, uses 75-15-0, Carbon disulfide, uses 75-21-8, Ethylene oxide, uses 76-06-2, Chloropicrin 76-44-8, Heptachlor Dioxathion 78-53-5, Amiton 78-57-9, Menazon 78-87-5, 1,2-Dichloropropane 79-34-5, Tetrachloroethane 79-57-2, Oxytetracycline 82-68-8, Quintozene 83-79-4, Rotenone Azinphos-methyl 87-17-2, Salicylanilide 87-68-3, 87-86-5, Pentachlorophenol 91-20-3, Naphthalene, Hexachlorobutadiene 91-53-2, Ethoxyquin 92-52-4, Biphenyl, uses 93-75-4, Thioquinox 97-11-0, Cyclethrin 97-17-6, Dichlofenthion 96-12-8, DBCP Bithionol 97-23-4, Dichlorophen 97-77-8, Disulfiram 98-01-1, Furfural, uses 99-30-9, Dicloran 99-49-0, Carvone 101-05-3, Anilazine 106-46-7, Para-dichlorobenzene 106-93-4, Ethylene dibromide 107-06-2, Ethylene dichloride, uses 107-13-1, Acrylonitrile, uses 107-18-6, Allyl alcohol, uses 107-49-3, TEPP 109-73-9, Butylamine, uses 109-94-4, Ethyl formate 114-26-1, Propoxur 115-26-4, Dimefox 115-29-7, Endosulfan 115-90-2, Fensulfothion 115-93-5, Cythioate 116-01-8, Ethoate-methyl 116-06-3, Aldicarb 117-18-0, Tecnazene 117-80-6, Dichlone 118-74-1, Hexachlorobenzene 118-75-2, Chloranil, 119-12-0, Pyridaphenthion 121-20-0, Cinerin II 121-21-1, Pyrethrin I 121-29-9, Pyrethrin II 121-75-5, Malathion 122-14-5, Fenitrothion 122-15-6, Dimetan 122-39-4, Diphenylamine, uses 126-07-8, Griseofulvin 126-22-7, Butonate 126-75-0, Demeton-S 131-52-2, Sodium pentachlorophenoxide 131-89-5, Dinex 132-27-4 133-06-2, Captan 133-07-3, Folpet 134-31-6, 8-Hydroxyquinoline sulfate 137-26-8, Thiram 137-29-1, Copper dimethyl dithiocarbamate 137-30-4, 140-56-7, Fenaminosulf 141-66-2, Dicrotophos 142-59-6, Nabam Ziram 142-71-2, Copper acetate 143-50-0 144-41-2, Morphothion 144-54-7, Metam 148-79-8, Thiabendazole 152-16-9, Schradan 297-78-9, Isobenzan 298-00-0, Parathion-methyl 298-02-2, Phorate 298-03-3, Demeton-O 298-04-4, Disulfoton 299-84-3, Fenchlorphos 299-86-5, Crufomate 300-76-5, Naled 309-00-2, Aldrin 315-18-4, Mexacarbate 327-98-Trichloronat 333-41-5, Diazinon 370-14-9, Isodrin 370-50-3, 327-98-0, Flucofuron 371-86-8, Mipafox 470-90-6, Chlorfenvinphos 479-18-5, Dilor 483-63-6, Crotamiton 485-31-4, Binapacryl 494-52-0, Anabasine 495-18-1, Benzohydroxamic acid 495-73-8, Benquinox 502-55-6, EXD 520-45-6, Dehydroacetic acid 533-74-4, Dazomet 534-52-1, DNOC 556-22-9, Glyodin 556-61-6, Methyl isothiocyanate 563-12-2, Ethion 556-22-9, Glyodin 556-61-6, Methyl isothiocyanate 572-48-5, Coumithoate 584-79-2, Allethrin 599-64-4 640-15-3, Thiometon 644-06-4, Precocene II 644-64-4, Dimetilan 671-04-5, Carbanolate 682-80-4, Demephion-O 731-27-1, Tolylfluanid Phosmet 786-19-6, Carbophenothion 867-27-6, Demeton-O-methyl 919-54-0, Acethion 919-76-6, Amidithion 919-86-8, Demeton-S-methyl 944-22-9, Fonofos 947-02-4, Phosfolan 950-10-7, Mephosfolan 950-37-8, Methidathion 963-22-4 973-21-7, Dinobuton 1031-47-6, Triamiphos 1085-98-9 1086-02-8, Pyridinitril 1113-02-6, Omethoate 1129-41-5, Metolcarb 1172-63-0, Jasmolin II 1317-38-0, Cupric oxide, 1332-40-7, Copper oxychloride 1344-69-0, Copper hydroxide 1344-70-3, Copper oxide 1398-61-4, Chitin 1491-41-4, Naftalofos 1563-66-2, Carbofuran 1563-67-3, Decarbofuran 1593-77-7, Dodemorph 1609-47-8, Diethyl pyrocarbonate 1646-88-4, Aldoxycarb 1715-40-8, Bromocyclen 1716-09-2, Fenthion-ethyl 1875-92-9D, 1897-45-6 1929-82-4, Dimethylbenzylammonium chloride, alkyl derivs. Nitrapyrin 2032-65-7, Methiocarb 2079-00-7, Blasticidin-S 2104-64-5, EPN 2104-96-3, Bromophos 2274-67-1, Dimethylvinphos 2275-14-1, Phenkapton 2275-18-5, Prothoate 2275-23-2, XMC 2310-17-0, Phosalone 2385-85-5, Mirex 2425-06-1, Captafol 2425-10-7, Xylylcarb 2439-01-2, Chinomethionat 2439-10-3, Dodine 2463-84-5, Dicapthon 2497-07-6, Oxydisulfoton 2540-82-1, Formothion 2550-75-6, Chlorbicyclen 2587-90-8, Demephion-S 2593-15-9, Etridiazole 2595-54-2, Mecarbam 2597-03-7, Phenthoate 2598-31-4, Quinacetol 2631-37-0, Promecarb 2631-40-5, Isoprocarb 2633-54-7, Trichlormetaphos-3 2634-33-5, 1.2-Benzisothiazol-3(2H)-one 2636-26-2, Cyanophos 2642-71-9, 2669-32-1, Lythidathion Azinphos-ethyl 2655-19-8, Butacarb

```
2675-77-6, Chloroneb 2682-20-4 2699-79-8, Sulfuryl fluoride
      2778-04-3, Endothion 2921-88-2 3251-23-8 3347-22-6, Dithianon 3383-96-8, Temephos 3478-94-2, Piperalin 3495-42-9, Chlorquinox
      3604-87-3, α-Ecdysone 3689-24-5, Sulfotep 3696-28-4,
      Dipyrithione 3734-95-0, Cyanthoate 3761-41-9, Mesulfenfos 3766-8. Fenobucarb 3773-49-7, Milneb 3811-49-2, Dioxabenzofos 3878-19-1,
                                                                                         3766-81-2,
      Fuberidazole 4097-36-3, Dinosam 4151-50-2, Sulfluramid 4234-79-1,
      Kelevan 4466-14-2, Jasmolin I 4824-78-6, Bromophos-ethyl RL: BUU (Biological use, unclassified); TEM (Technical or engineered
      material use); BIOL (Biological study); USES (Uses)
          (micronized wood preservative formulations comprising inorg. metal
          compds. and organic biocides)
      5131-24-8, Ditalimfos 5221-49-8, Pyrimitate 5221-53-4, Dimethirimol
IT
      5234-68-4, Carboxin 5259-88-1, Oxycarboxin 5289-74-7, Ecdysterone 5386-57-2, Dinopenton 5386-77-6, Dinosulfon 5598-13-0,
      Chlorpyrifos-methyl 5598-52-7, Fospirate 5707-69-7, Drazoxolon
      5707-73-3, Metazoxolone 5826-76-6, Phosnichlor 5827-05-4, IPSP
      5834-94-6, Azithiram 5834-96-8, Azothoate 5836-23-7, Tecoram
      5989-27-5 6073-72-9, Dinoterbon 6164-98-3, Chlordimeform 6843-97-6,
      Dodicin 6923-22-4, Monocrotophos 6980-18-3, Kasugamycin 6988-21-2,
      Dioxacarb 7055-03-0, Mebenil 7076-63-3, Cuprobam 7159-34-4,
      Pyroxychlor 7173-51-5, Dimethyldidecylammonium chloride 7219-78-5,
      Mazidox 7257-41-2, Dinoprop 7292-16-2, Propaphos 7439-92-1, Lead, uses 7440-02-0, Nickel, uses 7440-22-4, Silver, uses 7440-31-5, Tin, uses 7440-38-2, Arsenic, uses 7440-43-9, Cadmium, uses 7440-47-3,
      Chromium, uses 7440-48-4, Cobalt, uses 7440-50-8, Copper, uses
      7440-66-6, Zinc, uses 7440-69-9, Bismuth, uses 7492-68-4, Copper carbonate 7681-93-8, Natamycin 7696-12-0, Tetramethrin 7700-17-6, Crotoxyphos 7758-98-7, Copper sulfate, uses 7786-34-7,
                                                                                   7786-34-7,
      Mevinphos 8001-35-2, Camphechlor 8018-01-7, Mancozeb
                                                                                   8022-00-2,
      Demeton-methyl 8065-36-9, Bufencarb 8065-41-6, Aureofungin
      8065-48-3, Demeton 8065-62-1, Demephion 9006-42-2, Metiram
      9012-76-4, Chitosan 10004-44-1, Hymexazol 10265-92-6, Methamidophos 10311-84-9, Dialifos 10380-28-6, Copper 8-hydroxyquinolate 10405-27-3,
      Fluorimide 10453-86-8, Resmethrin 10537-47-0, Malonoben 10605-21-7 11096-18-7, Cufraneb 11113-80-7, Polyoxin
      11141-17-6, Azadirachtin 12069-69-1, Basic copper carbonate
      12071-83-9, Propineb 12122-67-7, Zineb 12407-86-2, Trimethacarb 12427-38-2, Maneb 12789-03-6, Chlordane 13067-93-1, Cyanofenphos 13071-79-9, Terbufos 13171-21-6, Phosphamidon 13194-48-4, Ethoprophos 13457-18-6, Pyrazophos 13516-27-3, Iminoctadine 13593-03-8, Quinalphos
      13593-08-3, Quinalphos-methyl 13804-51-8, Juvenile hormone I
      14047-23-5, Ampropylfos 14235-86-0, Hydrargaphen 14255-88-0,
      Fenazaflor 14484-64-1, Ferbam 14534-29-3, Copper borate 14698-29-4,
      Oxolinic acid 14816-16-1, Phoxim-methyl 14816-18-3, Phoxim
      14816-20-7, Chlorphoxim 14915-37-8, Copper omadine 15096-52-3, Cryolite 15263-53-3, Cartap 15310-01-7, Benodanil 15589-31-8,
      Terallethrin 15845-66-6, Fosetyl 16227-10-4, Triazbutil 16752-77-5,
      Methomyl 16893-85-9, Sodium hexafluorosilicate 17040-19-6
      17080-02-3, Furethrin 17109-49-8, Edifenphos 17598-02-6, Precocene I 17606-31-4, Bensultap 17702-57-7, Formparanate 17804-35-2, Benomyl 18181-70-9, Jodfenphos 18809-57-9, EMPC 18854-01-8, Isoxathion
      19378-58-6, Thiochlorfenphim 19622-19-6, Prothiocarb 19691-80-6,
                       20276-83-9, Prothidathion 20425-39-2, Pyresmethrin
      Athidathion
      20856-57-9, Chloraniformethan 21452-18-6, Metsulfovax 21548-32-3,
      Fosthietan 21564-17-0 21609-90-5, Leptophos 22224-92-6, Fenamiphos 22248-79-9, Tetrachlorvinphos 22259-30-9, Formetanate 22431-62-5, Bioethanomethrin 22439-40-3, Quinothion 22662-39-1, Rafoxanide
      22781-23-3, Bendiocarb 22963-93-5, Juvenile hormone III 22976-86-9,
      Polyoxorim 23031-36-9, Prallethrin 23103-98-2, Pirimicarb
      23135-22-0, Oxamyl 23505-41-1, Pirimiphos-ethyl 23526-02-5,
      Thuringiensin 23560-59-0, Heptenophos 23564-05-8, Thiophanate-methyl
      23564-06-9, Thiophanate 23593-75-1, Clotrimazole 23947-60-6, Ethirimol
      24017-47-8, Triazophos 24019-05-4, Sulcofuron 24201-58-9, Dichlozoline
      24353-61-5, Isocarbophos 24579-73-5, Propamocarb 24691-76-7,
      Pyracarbolid 24934-91-6, Chlormephos 25171-63-5, Thiocarboxime
```

```
25601-84-7,
25311-71-1, Isofenphos
                              25402-06-6, Cinerin I
Methocrotophos 26002-80-2, Phenothrin 26087-47-8, Iprobenfos
26172-55-4 26530-20-1 26644-46-2, Triforine 26766-27-8, Triarimol 27386-64-7, Mecarbinzid 27605-76-1, Probenazole 27811-89-8
28434-01-7, Bioresmethrin 28559-00-4, Cypendazole 28562-70-1, Furcarbanil 28730-17-8, Methfuroxam 29173-31-7, Mecarphon
29232-93-7, Pirimiphos-methyl 29672-19-3, Nitrilacarb 29973-13-5,
Ethiofencarb 30087-47-9, Fenethacarb 30560-19-1, Acephate
30864-28-9, Methacrifos 31218-83-4, Propetamphos 31251-03-3,
Fluotrimazole 31377-69-2, Pirimetaphos 31895-21-3, Thiocyclam
32809-16-8, Procymidone 33089-61-1, Amitraz 33399-00-7, Bromfenvinfos
33813-20-6, Etem 34218-61-6, Juvenile hormone II 34264-24-9, Promacyl
34462-96-9, Halacrinate 34643-46-4, Prothiofos 34681-10-2,
Butocarboxim 34681-23-7, Butoxycarboxim 34849-42-8, Cyclafuramide
35367-31-8, Penfluron 35367-38-5, Diflubenzuron 35400-43-2, Sulprofos
35554-44-0, Imazalil 35575-96-3, Azamethiphos 35764-59-1, Cismethrin
36145-08-1, Chlorprazophos 36519-00-3, Phosdiphen 36614-38-7,
Isothioate 36734-19-7, Iprodione 37032-15-8, Sophamide 38083-17-9, Climbazole 38260-54-7, Etrimfos 38260-63-8, Lirimfos 38524-82-2,
Trifenofos 38527-91-2, Etaphos 39196-18-4, Thiofanox 39247-96-6,
Primidophos 39300-45-3, Dinocap 39515-40-7, Cyphenothrin
39515-41-8, Fenpropathrin 40085-57-2, Tazimcarb 40341-04-6, Rabenzazole 40596-69-8, Methoprene 40596-80-3, Triprene 40626-35-5, Heterophos 41096-46-2, Hydroprene 41198-08-7, Profenofos 41219-31-2 Dithicrofos 41219-32-3, Thicrofos 41483-43-6, Bupirimate 41495-67-4
                                                                               41219-31-2,
                                                                               41495-67-4,
Hexylthiofos 41814-78-2, Tricyclazole 42509-80-8, Isazofos
42588-37-4, Kinoprene 43121-43-3, Triadimefon 50471-44-8, Vinclozolin
50512-35-1, Isoprothiolane 50642-14-3, Validamycin 51308-54-4,
Buthiobate 51487-69-5, Cloethocarb 51596-10-2, Milbemectin 51630-58-1, Fenvalerate 51877-74-8, Biopermethrin
52315-07-8 52645-53-1 52918-63-5, Deltamethrin
53112-28-0, Pyrimethanil 53878-17-4, Furophanate 53988-93-5, Mancopper
RL: BUU (Biological use, unclassified); TEM (Technical or engineered
material use); BIOL (Biological study); USES (Uses)
    (micronized wood preservative formulations comprising inorg. metal
    compds. and organic biocides)
54406-48-3, Empenthrin 54864-61-8, Myclozolin 55179-31-2, Bitertanol
55219-65-3, Triadimenol 55285-14-8, Carbosulfan 55406-53-6
55965-84-9, Kathon WT 56716-21-3, Hyquincarb 57018-04-9,
Tolclofos-methyl 57342-02-6, Epofenonane 57369-32-1, Pyroquilon
57646-30-7, Furalaxyl 57808-65-8, Closantel 57837-19-1, Metalaxyl 57966-95-7, Cymoxanil 58481-70-2, Dicresyl 58810-48-3, Ofurace 59669-26-0, Thiodicarb 60168-88-9, Fenarimol 60207-31-0, Azaconazole
60207-90-1 60207-93-4, Etaconazole 60238-56-4, Chlorthiophos 60568-05-0, Furmecyclox 60589-06-2, Metoxadiazone 61019-78-1,
Fenapanil 61444-62-0, Nifluridide 61566-21-0, Quinazamid 61949-77-7 62732-91-6, Debacarb 62865-36-5, Diclomezine 63284-71-9, Nuarimol
63755-05-5, Chlobenthiazone 63771-69-7, Zolaprofos 63837-33-2,
Diofenolan 63935-38-6, Cycloprothrin 64359-81-5 64440-88-6, Polycarbamate 64628-44-0, Triflumuron 65383-73-5, Precocene III
65400-98-8, Fenoxacrim 65571-68-8, Chlorfenazole 65691-00-1, Triarathene 65907-30-4, Furathiocarb 66063-05-6, Pencycuron
66215-27-8, Cyromazine 66230-04-4, Esfenvalerate 66246-88-6,
Penconazole 66332-96-5, Flutolanil 66841-25-6, Tralomethrin
66952-49-6, Methasulfocarb 67306-00-7, Fenpropidin
                                                                      67375-30-8,
Alpha-cypermethrin 67485-29-4, Hydramethylnon 67564-91-4,
Fenpropimorph 67747-09-5, Prochloraz 68085-85-8, Cyhalothrin
68359-37-5 68523-18-2, Fenpirithrin 68694-11-1, Triflumizole 69327-76-0, Buprofezin 69409-94-5, Fluvalinate 70017-93-5,
Isovaledione 70124-77-5, Flucythrinate 70166-48-2, Pyroxyfur 70193-21-4, Trichlamide 70288-86-7, Ivermectin 70630-17-0, Metalaxyl-M 70751-94-9, Tioxymid 71422-67-8, Chlorfluazuron 71626-11-4, Benalaxyl 71697-59-1, Theta-cypermethrin 71751-41-2, Abamectin 72459-58-6,
               72490-01-8, Fenoxycarb 72963-72-5, Imiprothrin
Triazoxide
74738-17-3, Fenpiclonil 75736-33-3, Diclobutrazol 75867-00-4,
Fenfluthrin 76280-91-6, Tecloftalam 76674-21-0, Flutriafol
```

IT

```
76703-62-3, Gamma-cyhalothrin 77732-09-3, Oxadixyl
                                                         79538-32-2,
Tefluthrin 79622-59-6, Fluazinam 79983-71-4, Hexaconazole
80060-09-9, Diafenthiuron 80844-07-1, Etofenprox 81412-43-3,
Tridemorph 82560-54-1, Benfuracarb 82657-04-3 83121-18-0,
Teflubenzuron 83130-01-2, Alanycarb 83657-17-4, Uniconazole-P
83657-18-5, Diniconazole-M 83657-22-1, Uniconazole 83657-24-3, Diniconazole 83733-82-8, Fosmethilan 84332-86-5, Chlozolinate
84527-51-5, Zarilamide 85509-19-9, Flusilazole 86479-06-3,
Hexaflumuron 86598-92-7, Imibenconazole 87130-20-9, Diethofencarb
88283-41-4, Pyrifenox 88671-89-0, Myclobutanil 89269-64-7, Ferimzone
89784-60-1, Pyraclofos 90338-20-8, Butathiofos 91315-15-0, Aldimorph 91465-08-6 94361-06-5 95465-99-9, Cadusafos 95737-68-1,
Pyriproxyfen 96182-53-5, Tebupirimfos 96489-71-3, Pyridaben
98243-83-5, Benalaxyl-M 98968-92-4 101007-06-1, Acrinathrin
101463-69-8, Flufenoxuron 101903-30-4, Pefurazoate 102851-06-9,
Tau-fluvalinate 103055-07-8, Lufenuron 103782-08-7, Allosamidin
103970-75-8, Quinconazole 104030-54-8, Carpropamid 104078-12-8,
Dinocton 105024-66-6, Silafluofen 105779-78-0, Pyrimidifen 106917-52
-6, Flusulfamide 107534-96-3 107713-58-6, Flufenprox 108173-90-6,
Guazatine 110235-47-7, Mepanipyrim 110488-70-5, Dimethomorph
111872-58-3, Halfenprox 111988-49-9, Thiacloprid 112143-82-5,
Triazamate 112226-61-6, Halofenozide 112281-77-3, Tetraconazole 112410-23-8, Tebufenozide 112636-83-6, Dicyclanil 112839-33-5,
              113036-88-7, Flucycloxuron 113507-06-5, Moxidectin
Furconazole
114369-43-6, Fenbuconazole 115852-48-7, Fenoxanil 116170-30-0,
Thicyofen 116255-48-2, Bromuconazole 116714-46-6, Novaluron
117428-22-5, Picoxystrobin 117704-25-3, Doramectin 118134-30-8,
Spiroxamine 118712-89-3, Transfluthrin 119168-77-3, Tebufenpyrad 119446-68-3, Difenoconazole 119544-94-4, Protrifenbute
120068-37-3 120116-88-3, Cyazofamid 121451-02-3, Noviflumuron
121552-61-2, Cyprodinil 122453-73-0, Chlorfenapyr
                                                         123572-88-3,
Furametpyr 124495-18-7, Quinoxyfen 125116-23-6, Metconazole
125225-28-7, Ipconazole 126448-41-7, Acibenzolar 126833-17-8, Fenhexamid 129496-10-2 129558-76-5, Tolfenpyrad 130000-40-7
                                                         130000-40-7
Thifluzamide 130339-07-0, Diflumetorim 131341-86-1, Fludioxonil
131807-57-3, Famoxadone 131860-33-8, Azoxystrobin 131983-72-7,
Triticonazole 133408-50-1, Metominostrobin 133855-98-8, Epoxiconazole
134074-64-9, Oxpoconazole 135410-20-7, Acetamiprid 136426-54-5,
Fluquinconazole 138261-41-3 139920-32-4, Diclocymet 140923-17-7,
Iprovalicarb 141517-21-7, Trifloxystrobin 143390-89-0, Kresoxim-methyl
143807-66-3, Chromafenozide 145767-97-1, Vaniliprole 148788-55-0,
Didecyldimethylammonium carbonate 149508-90-7, Simeconazole
149961-52-4, Dimoxystrobin 150824-47-8, Nitenpyram 153719-23-4,
Thiamethoxam 154025-04-4, Flumetover 156052-68-5, Zoxamide
158062-67-0, Flonicamid 161050-58-4, Methoxyfenozide 161326-34-7, Fenamidone 162650-77-3, Ethaboxam 165252-70-0, Dinotefuran 168316-95-8, Spinosad 170015-32-4, Flufenerim 173584-44-6, Indoxacarb
175013-18-0, Pyraclostrobin 175217-20-6, Silthiofam 178928-70-6,
Prothioconazole 179101-81-6, Pyridalyl 180409-60-3, Cyflufenamid
181587-01-9, Ethiprole 188425-85-6, Boscalid 189278-12-4, Proquinazid 209861-58-5, Acetoprole 210880-92-5, Clothianidin 211867-47-9,
Flumorph 220119-17-5, Selamectin 220899-03-6,
Metrafenone 223419-20-3, Profluthrin 223580-51-6, Tiadinil
240494-70-6, Metofluthrin 248593-16-0, Orysastrobin 271241-14-6,
Dimefluthrin 283594-90-1, Spiromesifen 361377-29-9, Fluoxastrobin
413615-35-7, Benthiavalicarb
RL: BUU (Biological use, unclassified); TEM (Technical or engineered
material use); BIOL (Biological study); USES (Uses)
   (micronized wood preservative formulations comprising inorg. metal
   compds. and organic biocides)
                                         7128-91-8, Dimethylhexadecylamine
1643-20-5, Dimethyldodecylamine oxide
RL: MOA (Modifier or additive use); USES (Uses)
   (micronized wood preservative formulations comprising inorg. metal
   compds. and organic biocides)
79-57-2, Oxytetracycline 87-17-2, Salicylanilide
```

IT

IT

```
584-79-2, Allethrin 7696-12-0, Tetramethrin
    10453-86-8, Resmethrin 11141-17-6, Azadirachtin
     26002-80-2, Phenothrin 39515-41-8, Fenpropathrin
     51630-58-1, Fenvalerate 52315-07-8 52645-53-1
     52918-63-5, Deltamethrin 66230-04-4, Esfenvalerate
     68085-85-8, Cyhalothrin 68359-37-5 82657-04-3
     91465-08-6 120068-37-3 220899-03-6,
    Metrafenone
    RL: BUU (Biological use, unclassified); TEM (Technical or engineered
    material use); BIOL (Biological study); USES (Uses)
        (micronized wood preservative formulations comprising inorg. metal
        compds. and organic biocides)
RN
    79-57-2 HCAPLUS
    2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-
CN
    3,5,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6S,12aS)-
     (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

RN 87-17-2 HCAPLUS CN Benzamide, 2-hydroxy-N-phenyl- (9CI) (CA INDEX NAME)

RN 584-79-2 HCAPLUS
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)

$$H_2C = CH - CH_2$$
 $O = CH - CH_2$
 $O = C$

$$\begin{array}{c|c} & & & \\ &$$

RN 10453-86-8 HCAPLUS

CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-, [5-(phenylmethyl)-3-furanyl]methyl ester (9CI) (CA INDEX NAME)

RN 11141-17-6 HCAPLUS

CN 1H,7H-Naphtho[1,8-bc:4,4a-c']difuran-5,10a(8H)-dicarboxylic acid, 10-(acetyloxy)octahydro-3,5-dihydroxy-4-methyl-8-[[(2E)-2-methyl-1-oxo-2-butenyl]oxy]-4-[(1aR,2S,3aS,6aS,7S,7aS)-3a,6a,7,7a-tetrahydro-6a-hydroxy-7a-methyl-2,7-methanofuro[2,3-b]oxireno[e]oxepin-1a(2H)-yl]-, dimethyl ester, (2aR,3S,4S,4aR,5S,7aS,8S,10R,10aS,10bR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 26002-80-2 HCAPLUS

CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,

(3-phenoxyphenyl) methyl ester (9CI) (CA INDEX NAME)

$$Me_2C = CH$$

$$C - O - CH_2$$

$$OPh$$

RN 39515-41-8 HCAPLUS

CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 51630-58-1 HCAPLUS

CN Benzeneacetic acid, 4-chloro- α -(1-methylethyl)-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 52315-07-8 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \text{Me} \\ \hline & \text{Cl}_2\text{C} & \text{CH} \\ \hline & \text{O} & \text{CN} \\ \end{array}$$

RN 52645-53-1 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 52918-63-5 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$\operatorname{Br}_2\mathsf{C}$$
 R OPh

RN 66230-04-4 HCAPLUS

CN Benzeneacetic acid, 4-chloro- α -(1-methylethyl)-, (S)-cyano(3-phenoxyphenyl)methyl ester, (α S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 68085-85-8 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 68359-37-5 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(4-fluoro-3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 82657-04-3 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (1R,3R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

$$F_3$$
C Z R R Ph

RN 91465-08-6 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1S,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

RN 120068-37-3 HCAPLUS

CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]- (9CI) (CA INDEX NAME)

RN 220899-03-6 HCAPLUS

CN Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6-methylphenyl)- (9CI) (CA INDEX NAME)

L50 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:405329 HCAPLUS

DN 142:463607

ED Entered STN: 12 May 2005

TI Preparation of benzoylpyridine derivatives as synergistic fungicides for controlling plant disease

```
Nishide, Hisaya; Nishimura, Shigeyuki; Mitani, Shigeru; Minamida, Koji;
IN
     Kanamori, Fumio; Ogawa, Munekazu; Kanbayashi, Shigehisa; Tanimura,
     Toyoshi; Higuchi, Koji; Kominami, Hidemasa; Okomoto, Tomohiro; Nishimura,
     Akihiro
     Ishihara Sangyo Kaisha, Ltd., Japan
PA
SO
     PCT Int. Appl., 73 pp.
     CODEN: PIXXD2
DT
     Patent
     Japanese
LА
IC
     ICM A01N043-40
     ICS A01N035-04; A01N037-06; A01N037-34; A01N043-08; A01N043-50;
           A01N043-54; A01N043-653; A01N043-84; A01N047-38; A01N047-42;
          A01N047-44
     27-16 (Heterocyclic Compounds (One Hetero Atom))
CC
     Section cross-reference(s): 5
FAN.CNT 1
                                                                          DATE
     PATENT NO.
                           KIND
                                   DATE
                                                APPLICATION NO.
                                                                          -----
     ------------
                                   -----
                                                 -------------
                                                WO 2004-JP16156
                                                                          20041029
PΤ
     WO 2005041663
                           A1
                                   20050512
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
              EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
              SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI JP 2003-371863
                                   20031031
     JP 2004-6355
                            Α
                                   20040114
     JP 2004-210174
                                   20040716
CLASS
 PATENT NO.
                  CLASS
                          PATENT FAMILY CLASSIFICATION CODES
                          A01N043-40
 WO 2005041663
                  ICM
                          A01N035-04; A01N037-06; A01N037-34; A01N043-08;
                  ICS
                          A01N043-50; A01N043-54; A01N043-653; A01N043-84;
                          A01N047-38; A01N047-42; A01N047-44
     MARPAT 142:463607
os
GI
```

$$(x)_n$$

$$(R^2)_p$$

Ι

There is disclosed a synergistic fungicide composition characterized by containing, as active ingredients, (a) a benzoylpyridine derivative represented by the formula (I) (wherein X = halogeno, nitro, an optionally substituted hydrocarbon group, optionally substituted alkoxy, optionally substituted aryloxy, optionally substituted cycloalkoxy, hydroxy, optionally substituted alkylthio, cyano, optionally esterified or amidated carboxy, or optionally substituted amino; n = 1, 2, 3, or 4; R1 = optionally substituted alkyl; R2 = each optionally substituted alkyl, alkoxy, aryloxy, or cycloalkoxy, hydroxy; p = 1, 2, 3; R3 = optionally substituted alkoxy, hydroxy; provided that at least two of the R2 and R3 may form a fused ring containing oxygen) or a salt of the derivative and (b) at least one

```
other fungicide. When applied to crop plants infected with plant
diseases, the bactericide composition is stably and highly effective in
controlling pests. A combination of the compound I with other fungicide
exhibits unexpectedly more effective fungicidal activity compared to a
case when the compound I is used alone. Thus, 4,5-dichloro-2-
methoxypyridine was treated with lithium diisopropylamide in THF at
78° for 2 h to give a solution of 4,5-dichloro-2-methoxy-3-
pyridyllithium which was treated with a solution of 2,3,4-trimethoxy-6-
methylbenzaldehyde in THF and stirred for 30 min and quenched by adding
water to give, after workup and silica gel chromatog., 51%
(2,3,4-trimethoxy-6-methylbenzoyl)(4,5-dichloro-2-methoxy-3-
pyridyl)methanol (II). II was oxidized by MnO2 in toluene under reflux
for 2 h to give 65% 3-(2,3,4-trimethoxy-6-methylbenzoyl)-4,5-dichloro-2-
methoxypyridine (III). III in combination with fenpropimorph exhibited
synergistic fungicidal activity against Erysiphe gaminis f. s. tritici.
benzoylpyridine prepn synergistic fungicide controlling plant disease
Disease, plant
   (preparation of benzoylpyridine derivs. as synergistic fungicides for
   controlling plant disease)
Fungicides
   (synergistic; preparation of benzoylpyridine derivs. as synergistic
   fungicides for controlling plant disease)
              688046-47-1P
                             688064-05-3P
688046-46-0P
RL: AGR (Agricultural use); BSU (Biological study, unclassified); RCT
(Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
   (preparation of benzoylpyridine derivs. as synergistic fungicides for
   controlling plant disease)
              387880-34-4P
                             387880-35-5P
                                            387880-44-6P
                                                            387880-49-1P
387880-05-9P
387880-60-6P
              387880-62-8P
                              387880-63-9P
                                            688046-29-9P
                                                            688046-30-2P
                             688046-33-5P
                                            688046-34-6P
                                                           688046-35-7P
688046-31-3P
              688046-32-4P
688046-37-9P 688046-38-0P
                                            688046-40-4P
                             688046-39-1P
                                                            688046-41-5P
688046-42-6P 688046-43-7P
                              688046-44-8P
                                            688046-45-9P
                                                            688046-48-2P
                                            688046-53-9P
                                                            688046-54-0P
                              688046-51-7P
688046-49-3P
              688046-50-6P
688046-55-1P
              688046-56-2P
                              688046-57-3P
                                            688046-58-4P
                                                            688046-59-5P
688046-60-8P
              688046-61-9P
                              688046-62-0P
                                            688046-63-1P
                                                            688046-64-2P
              851607-22-2P
851607-21-1P
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
(Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of benzoylpyridine derivs. as synergistic fungicides for
   controlling plant disease)
3678-62-4P, 2-Chloro-4-methylpyridine
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
preparation); PREP (Preparation); RACT (Reactant or reagent)
   (preparation of benzoylpyridine derivs. as synergistic fungicides for
   controlling plant disease)
102-24-9, Trimethoxyboroxin
                             109-77-3, Malononitrile 121-43-7,
Trimethyl borate 124-38-9, Carbon dioxide, reactions 124-41-4, Sodium
           372-48-5, 2-Fluoropyridine 544-92-3, Copper(I) cyanide
methoxide
                       695-34-1, 2-Amino-4-methylpyridine
                                                            2369-19-9.
544-97-8, Dimethylzinc
2-Fluoro-5-methylpyridine
                           5436-21-5, Acetylacetaldehyde dimethyl acetal
6443-69-2, 3,4,5-Trimethoxytoluene 22383-85-3, 2,3,4-Trimethoxy-6-
methylbenzaldehyde 69045-84-7, 2,3-Dichloro-5-trifluoromethylpyridine
72326-72-8, 2-Bromo-3,4,5-trimethoxytoluene 80289-91-4,
2,3,6-Trichloro-5-trifluoromethylpyridine 81565-18-6,
2-Chloro-4-trifluoromethylpyridine
                                   100848-70-2, 2-Methoxy-4-
methylpyridine
               851607-34-6
RL: RCT (Reactant); RACT (Reactant or reagent)
   (preparation of benzoylpyridine derivs. as synergistic fungicides for
   controlling plant disease)
                                      22282-70-8P, 2-Fluoro-4-
5444-01-9P, 3-Cyano-4-methylpyridine
                            72141-44-7P, 4-Chloro-2-methoxypyridine
iodopyridine 65169-38-2P
79004-02-7P, 2,3,4-Trimethoxy-6-methylbenzoic acid
                                                    79574-82-6P
98197-72-9P, 4-Iodo-2-methoxypyridine 113975-22-7P, 2-Fluoro-3-
                            153034-78-7P, 2-Fluoro-3-iodo-5-
iodopyridine 149379-71-5P
```

st

TT

IT

TТ

IT

TT

IT

TΤ

```
methylpyridine
                       168428-74-8P
                                          212573-50-7P
                                                           219715-34-1P
                                                                           387880-14-0P
     387880-33-3P 387880-85-5P 387880-88-8P 387880-89-9P 387880-90-2P
     387881-02-9P
                     410547-37-4P
                                      410547-38-5P 688046-83-5P 688046-84-6P
     688046-87-9P
                      688046-92-6P 688047-04-3P 688047-08-7P
                                                                          688047-09-8P
                                                        851607-26-6P
                                      851607-25-5P
     851607-23-3P
                     851607-24-4P
                                                                          851607-27-7P
                                                         851607-31-3P
     851607-28-8P
                      851607-29-9P
                                        851607-30-2P
                                                                          851607-32-4P
     851607-33-5P
                      851607-35-7P
                                        851607-36-8P
                                                         851607-37-9P
                                                                          851607-38-0P
                      851607-40-4P
                                      851607-41-5P
     851607-39-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
         (preparation of benzoylpyridine derivs. as synergistic fungicides for
         controlling plant disease)
     76-06-2, Chloropicrin 76-87-9, Fentin hydroxide
                                                                82-68-8, Quintozene
IT
     133-06-2, Captan 133-07-3, Folpet 137-42-8, Metam sodium 533-74-4,
     Dazomet 900-95-8, Fentin acetate 1085-98-9, Dichlofluanid 1897-45-6,
     Chlorothalonil 2425-06-1, Captafol 2439-01-2, Quinomethionate
     8018-01-7, Mancozeb 9006-42-2, Metiram 10004-44-1, Hymexazol
     10605-21-7, Carbendazim 11113-80-7, Polyoxin 12071-83-9, Prop
12122-67-7, Zineb 12427-38-2, Maneb 13516-27-3, Iminoctadine
                                 11113-80-7, Polyoxin 12071-83-9, Propineb
     17109-49-8, O-Ethyl S,S-diphenylphosphorodithioate
                                                                 17804-35-2, Benomyl
     20427-59-2, Cupric hydroxide 23564-05-8, Thiophanate-Methyl
     25606-41-1, Propamocarb hydrochloride 26087-47-8 26644-46-2, Triforine
     27355-22-2, Fthalide 27605-76-1, Probenazole 32809-16-8, Procymidone 36734-19-7, Iprodione 39148-24-8, Fosetyl-Al 41814-78-2, Tricyclazole 43121-43-3, Triadimefon 50471-44-8, Vinclozolin 50512-35-1,
                                                             41814-78-2, Tricyclazole
     Isoprothiolane 53112-28-0, Pyrimethanil 55179-31-2, Bitertanol
     55219-65-3, Triadimenol 55814-41-0, Mepronil
                                                             57018-04-9,
     Tolclofos-methyl 57369-32-1, Pyroquilon 57646-30-7, Furalaxyl
                               57966-95-7, Cymoxanil 58810-48-3; Ofurace 60207-90-1, Propiconazole 60207-93-4,
     57837-19-1, Metalaxyl
     60168-88-9, Fenarimol
     Etaconazole 62865-36-5, Diclomezine 64440-88-6, Polycarbamate
     66063-05-6, Pencycuron 66246-88-6, Penconazole 66332-96-5, Flutolanil
     67306-00-7, Fenpropidine 67564-91-4, Fenpropimorph
                                                                   67747-09-5,
     Prochloraz
                  68694-11-1, Triflumizole 69581-33-5, Cyprofuram
     70630-17-0, Metalaxyl M 71626-11-4, Benalaxyl 74738-17-3, Fenpiclonil 76674-21-0, Flutriafol 77732-09-3, Oxadixyl 79622-59-6, Fluazinam 79983-71-4, Hexaconazole 85509-19-9, Flusilazole 86598-92-7,
     Imibenconazole
                       87130-20-9, Diethofencarb 88283-41-4, Pyrifenox
     88671-89-0, Myclobutanil 94361-06-5, Cyproconazole 106917-52-6,
     Flusulfamide 107534-96-3, Tebuconazole 110235-47-7, Mepanipyrim 110488-70-5, Dimethomorph 112281-77-3, Tetraconazole 112839-32-4,
                        115852-48-7, Fenoxanil 117428-22-5, Picoxystrobin
     cis-Furconazole
     118134-30-8, Spiroxamine 120116-88-3, Cyazofamid 121552-61-2,
     Cyprodinil 124495-18-7, Quinoxyfen 125116-23-6, Metconazole 126833-17-8, Fenhexamid 131341-86-1, Fludioxonil 131807-57-3, Famoxadone 131860-33-8, Azoxystrobin 133855-98-8, Epoxiconazole 134074-64-9, Oxpoconazole 136426-54-5, Fluquinconazole 139920-32-4,
     Diclocymet 140923-17-7, Iprovalicarb 141517-21-7, Trifloxystrobin
     143390-89-0, Kresoxim-methyl 149508-90-7, Simeconazole 149961-52-4,
     Dimoxystrobin 156052-68-5, Zoxamide 161326-34-7, Fenamidone
                                169202-06-6, Iminoctadine tris(albesilate)
     162650-77-3, Ethaboxam
     174212-12-5, Oxpoconazole fumarate 175217-20-6, Silthiopham 178928-70-6, Prothioconazole 180409-60-3, Cyflufenamid 182
                                                                        182916-02-5,
                                                189278-12-4, Proquinazid
                   188425-85-6, Nicobifen
     Metominofen
     211867-47-9, Flumorph 220899-03-6, Metrafenone
     223580-51-6, Tiadinil
                                361377-29-9, Fluoxastrobin
                                                                  413615-35-7,
                         851607-42-6
     Benthiavalicarb
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
         (synergistic agrochem. fungicide composition containing; preparation of
         benzoylpyridine derivs. as synergistic fungicides for controlling plant
         disease)
ΙT
     851607-43-7
                     851607-44-8
                                     851607-45-9
                                                     851607-46-0
                                                                     851607-47-1
     851607-48-2
                                                     851607-51-7
                                                                     851607-52-8
                     851607-49-3
                                     851607-50-6
     851607-53-9
                     851607-55-1
                                     851607-56-2
                                                     851607-57-3
                                                                      851607-58-4
     851607-59-5
                     851607-60-8
                                     851607-61-9
                                                     851607-62-0
                                                                      851607-63-1
```

```
851607-66-4
                                                851607-67-5 851607-68-6
     851607-64-2
                   851607-65-3
                                 851607-71-1
                                                851607-72-2 851607-73-3
     851607-69-7
                   851607-70-0
     851607-74-4
                   851607-75-5
                                 851607-76-6
                                                851607-77-7
                                                              851607-78-8
     851607-79-9
                   851607-80-2
                                 851607-81-3
                                                851607-82-4
                                                              851607-83-5
                                               851607-87-9
                                                              851607-88-0
                                 851607-86-8
     851607-84-6
                   851607-85-7
                                                              851607-93-7
     851607-89-1
                   851607-90-4
                                 851607-91-5
                                                851607-92-6
     851607-94-8
                   851607-95-9
                                 851607-96-0
                                                851607-97-1
                                                              851607-98-2
                                                851608-02-1
                                                              851608-03-2
                   851608-00-9
     851607-99-3
                                 851608-01-0
                                                              851608-08-7
     851608-04-3
                   851608-05-4
                                 851608-06-5
                                                851608-07-6
                                                              851608-13-4
     851608-09-8
                   851608-10-1
                                 851608-11-2
                                                851608-12-3
                                                851608-17-8
                                                              851608-18-9
                                 851608-16-7
                   851608-15-6
     851608-14-5
     851608-19-0
                   851608-20-3
                                 851608-21-4
                                                851608-22-5
                                                              851608-23-6
                                                851608-27-0
                                                              851608-28-1
     851608-24-7
                   851608-25-8
                                 851608-26-9
                                 851608-31-6
                   851608-30-5
     851608-29-2
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (synergistic agrochem: fungicide composition; preparation of benzoylpyridine
        derivs. as synergistic fungicides for controlling plant disease)
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Ishihara Sangyo Kaisha Ltd; WO 022527 Al 2002
(2) Ishihara Sangyo Kaisha Ltd; EP 1296952 A 2002 HCAPLUS
(3) Ishihara Sangyo Kaisha Ltd; JP 2002356474 A 2002 HCAPLUS
(4) Ishihara Sangyo Kaisha Ltd; US 2003216444 A1 2002 HCAPLUS
IT
     220899-03-6, Metrafenone
     RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
     ANST (Analytical study); BIOL (Biological study); USES (Uses)
        (synergistic agrochem. fungicide composition containing; preparation of
        benzoylpyridine derivs. as synergistic fungicides for controlling plant
        disease)
     220899-03-6 HCAPLUS
RN
     Methanone, (3-bromo-6-methoxy-2-methylphenyl) (2,3,4-trimethoxy-6-
CN
     methylphenyl) - (9CI) (CA INDEX NAME)
```

IT 851607-68-6
 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);
 ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (synergistic agrochem. fungicide composition; preparation of benzoylpyridine derivs. as synergistic fungicides for controlling plant disease)
RN 851607-68-6 HCAPLUS
CN Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6-methylphenyl)-, mixt. with (5-chloro-2-methoxy-4-methyl-3-pyridinyl)(2,3,4-trimethoxy-6-methylphenyl)methanone (9CI) (CA INDEX NAME)

CRN 688046-61-9 CMF C18 H20 Cl N O5

CM 2

CRN 220899-03-6 CMF C19 H21 Br O5

```
ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
L50
     2005:405320 HCAPLUS
AN
DN
     142:425351
ED
     Entered STN: 12 May 2005
     Synergistic fungicidal combinations comprising a carboxamide derivative
TT
IN
     Wachendorff-Neumann, Ulrike; Dahmen, Peter; Dunkel, Ralf; Elbe,
     Hans-Ludwig; Rieck, Heiko; Suty-Heinze, Anne
PΑ
     Bayer Cropscience Aktiengesellschaft, Germany
     PCT Int. Appl., 126 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     German
     ICM A01N
IC
     5-2 (Agrochemical Bioregulators)
CC
FAN.CNT 1
                                                  APPLICATION NO.
                                                                             DATE
                                     DATE
     PATENT NO.
                            KIND
                                                   ------
                             ----
                                                  WO 2004-EP11403
                                                                             20041012
ΡI
     WO 2005041653
                             A2
                                     20050512
     WO 2005041653
                             A3
                                     20050728
              AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
               CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
              NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
              TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
                                     20050525
                                                   DE 2003-10349501
                                                                             20031023
     DE 10349501
                              A1
PRAI DE 2003-10349501
                                     20031023
CLASS
                           PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                   CLASS
 WO 2005041653 ICM
                           A01N
     MARPAT 142:425351
```

Synergistic fungicidal combinations comprise a carboxamide derivative I [R1 = AΒ H, halo or (halo)alkyl; R1 = (un)substituted Ph, furyl, pyridinyl, etc.] and any of a very large number of known fungicides. st

synergism fungicide compn carboxamide deriv

IT Fungicides

IT

(synergistic, agrochem; combinations comprising a carboxamide derivative) 87-41-2D, Phthalide, mixture with carboxamide derivative 133-06-2D, Captan, mixture with carboxamide derivative 133-07-3D, Folpet, mixture with carboxamide 137-26-8D, Thiram, mixture with carboxamide derivative 148-79-8D, Thiabendazole, mixture Ziram, mixture with carboxamide derivative with carboxamide derivative 731-27-1D, Tolylfluanid, mixture with carboxamide 1018-71-9D, Pyrrolnitrine, mixture with carboxamide derivative derivative 1085-98-9D, Dichlofluanid, mixture with carboxamide derivative 1332-40-7D, Copper oxychloride, mixture with carboxamide derivative 1593-77-7D, Dodemorph, mixture with carboxamide derivative 1897-45-6D, Chlorothalonil, mixture with 2425-06-1D, Captafol, mixture with carboxamide derivative carboxamide derivative 2439-10-3D, Dodine, mixture with carboxamide derivative 3347-22-6D, Dithianone, mixture with carboxamide derivative 3878-19-1D, Fuberidazole, mixture with carboxamide derivative 5234-68-4D, Carboxin, mixture with carboxamide derivative 6980-18-3D, Kasugamycin, mixture with carboxamide 9006-42-2D, derivative 8018-01-7D, Mancozeb, mixture with carboxamide derivative Metiram, mixture with carboxamide derivative 10605-21-7D, Carbendazim, mixture 12071-83-9D, Propineb, mixture with carboxamide with carboxamide derivative 12427-38-2D. 12122-67-7D, Zineb, mixture with carboxamide derivative Maneb, mixture with carboxamide derivative 13598-36-2D, Phosphonic acid, mixture with carboxamide derivative 17109-49-8D, Edifenphos, mixture with carboxamide 17804-35-2D, Benomyl, mixture with carboxamide derivative derivative 23564-05-8D, Thiophanatemethyl, mixture with carboxamide derivative 23564-06-9D, Thiophanateethyl, mixture with carboxamide derivative 24579-73-5D, Propamocarb, mixture with carboxamide derivative 25 25606-41-1D. Propamocarbhydrochloride, mixture with carboxamide derivative 27605-76-1D, Probenazole, mixture with carboxamide derivative 32809-16-8D, Procymidone, mixture with carboxamide derivative 36734-19-7D, Iprodione, mixture with carboxamide derivative 39148-24-8D, FosetylAl, mixture with carboxamide derivative 41814-78-2D, Tricyclazole, mixture with carboxamide derivative 43121-43-3D, Triadimefon, mixture with carboxamide derivative 50471-44-8D, Vinclozolin, 50512-35-1D, Isoprothiolane, mixture with mixture with carboxamide derivative carboxamide derivative 51832-87-2D, Picobenzide, mixture with carboxamide 53112-28-0D, Pyrimethanil, mixture with carboxamide derivative derivative 55179-31-2D, Bitertanol, mixture with carboxamide derivative 55219-65-3D, 57520-17-9D, Iminoctadine Triadimenol, mixture with carboxamide derivative triacetate, mixture with carboxamide derivative 57646-30-7D, Furalaxyl, mixture with carboxamide derivative 57837-19-1D, Metalaxyl, mixture with carboxamide 57966-95-7D, Cymoxanil, mixture with carboxamide derivative 60207-31-0D, Azaconazole, mixture with carboxamide derivative 60207-90-1D, Propiconazole, mixture with carboxamide derivative 60207-93-4D, Etaconazole, mixture with carboxamide derivative 65571-68-8, Clorofenazole 66063-05-6D, Pencycuron, mixture with carboxamide derivative 66246-88-6D, Penconazole,

mixture with carboxamide derivative 67564-91-4D, Fenpropimorph, mixture with carboxamide derivative 67747-09-5D, Prochloraz, mixture with carboxamide 70630-17-0D, Metalaxyl-M, mixture with carboxamide derivative 71626-11-4D, Benalaxyl, mixture with carboxamide derivative 72459-58-6D, 74738-17-3D, Fenpiclonil, Triazoxide, mixture with carboxamide derivative mixture with carboxamide derivative 76674-21-0D, Flutriafol, mixture with carboxamide derivative 77732-09-3D, Oxadixyl[, mixture with carboxamide derivative 79622-59-6D, Fluazinam, mixture with carboxamide derivative 79983-71-4D, Hexaconazole, mixture with carboxamide derivative 81412-43-3D, Tridemorph, mixture with carboxamide derivative 85509-19-9D, Flusilazole, mixture with carboxamide derivative 87130-20-9D, Diethofencarb, mixture with carboxamide derivative 88671-89-0D, Myclobutanil, mixture with carboxamide derivative 89269-64-7D, Ferimzone, mixture with carboxamide derivative 91315-15-0D, Aldimorph, mixture with carboxamide derivative 94361-06-5D, Cyproconazole, mixture with carboxamide derivative 98243-83-5D, Benalaxyl-M, mixture with carboxamide derivative 101903-30-4D, Pefurazoate, mixture with carboxamide derivative 103970-75-8D, Quinconazole, mixture with carboxamide derivative 104030-54-8D, Carpropamid, mixture with carboxamide derivative 107534-96-3D, Tebuconazole, mixture with carboxamide derivative 108173-90-6, Guazatine 110235-47-7D, Mepanipyrim, mixture with carboxamide derivative 110488-70-5D, Dimethomorph, mixture with carboxamide derivative 112281-77-3D, Tetraconazole, mixture with carboxamide derivative 114369-43-6D, Fenbuconazole, mixture with carboxamide derivative 115852-48-7D, Fenoxanil, mixture with carboxamide 116255-48-2D, Bromuconazole, mixture with carboxamide derivative derivative 117428-22-5D, Picoxystrobin, mixture with carboxamide derivative 118134-30-8D, Spiroxamine, mixture with carboxamide derivative 119446-68-3D, Difenoconazole, mixture with carboxamide derivative 119899-14-8D, mixture with carboxamide derivative 120116-88-3D, Cyazofamid, mixture with carboxamide derivative 121552-61-2D, Cyprodinil, mixture with carboxamide derivative 123572-88-3D, Furametpyr, mixture with carboxamide derivative 125116-23-6D, Metconazole, mixture with carboxamide derivative 125225-28-7D, IPconazole, mixture with carboxamide derivative 126833-17-8D, Fenhexamid, mixture with carboxamide derivative 131341-86-1D, Fludioxonil, mixture with carboxamide derivative 131752-26-6D, mixture with carboxamide derivative 131807-57-3D, Famoxadone, mixture with carboxamide derivative 131860-33-8D, Azoxystrobin, mixture with carboxamide derivative 131983-72-7D, Triticonazole, mixture with carboxamide derivative 133408-50-1D, Metominostrobin, mixture with carboxamide derivative 133855-98-8D, Epoxiconazole, mixture with carboxamide derivative 135158-54-2D, Acibenzolar-S-methyl, mixture with carboxamide derivative 136426-54-5D, Fluquinconazole, mixture with carboxamide derivative 139920-32-4D, Diclocymet, mixture with carboxamide derivative 140923-17-7D, Iprovalicarb, mixture with carboxamide derivative 141517-21-7D, Trifloxystrobin, mixture with carboxamide derivative 143390-89-0D, Kresoximmethyl, mixture with carboxamide derivative 149508-90-7D, Simeconazole, mixture with carboxamide derivative 149961-52-4D, Dimoxystrobin, mixture with carboxamide derivative 156052-68-5D, Zoxamide, mixture with carboxamide derivative 156581-89-4D, mixture with carboxamide 158169-73-4D, mixture with carboxamide derivative 161326-34-7D, Fenamidone, mixture with carboxamide derivative 162650-77-3D, Ethaboxam, mixture with carboxamide derivative 175013-18-0D, Pyraclostrobin, mixture with carboxamide derivative 175217-20-6D, Silthiofam, mixture with carboxamide derivative 178928-70-6D, Prothioconazole, mixture with carboxamide derivative 181624-76-0D, mixture with carboxamide derivative 181627-13-4D, mixture with carboxamide derivative 183675-82-3D, Penthiopyrad, mixture with carboxamide derivative 183676-44-0D, mixture with carboxamide derivative 187233-48-3D, mixture 188027-78-3D, mixture with carboxamide derivative with carboxamide derivative 188425-85-6D, Boscalid, mixture with carboxamide derivative 189873-26-5D, mixture with carboxamide derivative 210230-99-2D, mixture with carboxamide derivative 214706-53-3D, mixture with carboxamide derivative 220899-03-6D , Metrafenone, mixture with carboxamide derivative 221451-58-7D, mixture with carboxamide derivative 221667-31-8 223580-51-6D, Tiadinil, mixture with carboxamide derivative 224049-04-1D, mixture with carboxamide 237055-17-3D, mixture with carboxamide derivative 248593-16-0D, derivative Orysastrobin, mixture with carboxamide derivative 249648-16-6D, mixture with 308286-29-5D, mixture with carboxamide derivative carboxamide derivative 361377-29-9D, Fluoxastrobin, mixture with carboxamide derivative 367262-88-2D, mixture with carboxamide derivative 367262-94-0D, mixture with carboxamide

```
367262-97-3D, mixture with carboxamide derivative 367263-03-4D, mixture
     derivative
     with carboxamide derivative 374726-62-2D, mixture with carboxamide derivative
     413615-35-7D, Benthiavalicarb, mixture with carboxamide derivative
     424824-17-9D, mixture with carboxamide derivative
                                                        424831-80-1D, mixture with
     carboxamide derivative
                             497934-59-5D, mixture with carboxamide derivative
     497934-60-8D, mixture with carboxamide derivative
                                                         577794-43-5D, mixture with
     carboxamide derivative 577954-87-1D, mixture with carboxamide derivative
     577954-88-2D, mixture with carboxamide derivative
                                                        577955-06-7D, mixture with
     carboxamide derivative
                              581809-46-3D, mixture with carboxamide derivative
     756523-12-3D, mixture with carboxamide derivative
                                                        849674-85-7D, mixture with
     carboxamide derivative 849674-86-8D, mixture with carboxamide derivative
     849674-87-9D, mixture with carboxamide derivative
                                                         849674-88-0D, mixture with
     carboxamide derivative 851018-45-6D, mixture with carboxamide derivative
                                                        851018-47-8D, mixture with
     851018-46-7D, mixture with carboxamide derivative
     carboxamide derivative 851018-48-9
                                           851018-49-0
                                                          851018-50-3
                                                                        851018-51-4
                                                             851018-56-9
     851018-52-5
                   851018-53-6
                                 851018-54-7
                                               851018-55-8
     851018-57-0
                   851018-58-1
                                 851018-59-2
                                               851018-60-5
                                                             851018-61-6
                                                             851018-66-1
     851018-62-7
                   851018-63-8
                                 851018-64-9
                                               851018-65-0
     851018-67-2
                                 851018-69-4
                                               851018-70-7
                                                             851018-71-8
                   851018-68-3
                                               851018-75-2
     851018-72-9
                   851018-73-0
                                 851018-74-1
                                                             851018-76-3
     851018-78-5
                   851018-79-6
                                 851018-80-9
                                               851018-81-0
                                                             851018-82-1
                   851018-84-3
                                                             851018-87-6
                                 851018-85-4
                                               851018-86-5
     851018-83-2
     851018-88-7
                   851018-89-8
                                 851018-90-1
                                               851018-91-2
                                                             851018-92-3
                                                             851018-98-9
     851018-93-4
                   851018-94-5
                                 851018-95-6
                                               851018-97-8
                                 851019-02-8
                                               851019-03-9
                                                             851019-04-0
                  851019-01-7
     851018-99-0
     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
        (synergistic fungicidal composition)
IT
     494793-45-2D, mixts. containing
                                       494793-67-8D, mixts. containing
                                                                         640290-16-0D,
                        640290-17-1D, mixts. containing
     mixts. containing
    RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
        (synergistic fungicidal compns.)
     220899-03-6D, Metrafenone, mixture with carboxamide derivative
IT
     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
        (synergistic fungicidal composition)
RN
     220899-03-6 HCAPLUS
    Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6-
CN
    methylphenyl) - (9CI) (CA INDEX NAME)
```

```
ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
L50
AN
     2005:346774 HCAPLUS
DN
     142:387616
     Entered STN: 22 Apr 2005
ED
     Synergistic fungicidal combinations comprising carboxamide derivatives
ΤI
TN
     Wachendorff-Neumann, Ulrike; Dahmen, Peter; Dunkel, Ralf; Elbe,
     Hans-Ludwig; Suty-Heinze, Anne; Rieck, Heiko
PΑ
     Bayer Cropscience Aktiengesellschaft, Germany
     PCT Int. Appl., 141 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     German
IC
     ICM A01N043-56
         A01N043-78; A01N057-12; A01N047-38; A01N047-32; A01N047-18;
          A01N047-14; A01N047-12; A01N047-04; A01N043-90; A01N043-88;
          A01N043-80; A01N043-707; A01N043-653; A01N043-54; A01N043-50;
```

A01N043-40; A01N043-30; A01N037-50; A01N037-46 CC 5-2 (Agrochemical Bioregulators)

FAN	. CNT	1					J		•									
	PATENT NO.					KIND DATE			APPLICATION NO.						DATE			
																		
PI WO 2005034628				A1 20050421			WO 2004-EP10830						20040928					
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	ВG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
						CU,												
						HR,												
						LT,												
						PG,												
						TR,												
		RW:				KE,												
						KZ,												
						FR,												
						BF,												
				TD,		,	,		•	,		•			•	•		·
	DE	1034				A1		2005	0504		DE 2	003-	1034	7090		2	0031	010
D D A 1		2003						2003										
CLAS		2005	100	1,05	•	••												
		NO.		CLA	ss 	PATE	NT F.	AMIL	Y CL	ASSI	FICA	TION	COD	ES				
WO 2005034628 ICM			A01N043-56															
				A01N043-78; A01N057-12; A01N047-38; A01N047-32;														
						A01N		•			•							
						A01N043-90; A01N043-88; A01N043-80; A01N043-707; A01N043-653; A01N043-54; A01N043-50; A01N043-40;												
						AO1N										10	,	
05	MA	יייאמם	140.	2076		WO TIM	0.13	50,	NO IN	007	50, 1	114						

OS MARPAT 142:387616 GI

$$A-CO-NH$$
 R^1
 R^3
 R^2
 R^3

AB Synergistic fungicidal mixts. comprise a carboxamide derivative I [R1= H or F; R2 = halo, (halo)alkyl or (halo)alkoxy; , R3 = H, halo or (halo)alkyl; A = (un)substituted Ph, imidazolyl, thiazolyl, etc.] and any of 22 groups of known fungicides.

ST synergism fungicide combination carboxamide deriv

IT Fungicides

(synergistic; synergistic fungicidal combinations comprising carboxamide derivs.)

87-41-2D, Phthalide, mixture with carboxamide derivative 133-06-2D, Captan, IT mixture with carboxamide derivative 133-07-3D, Folpet, mixture with carboxamide 137-26-8D, Thiram, mixture with carboxamide derivative 137-30-4D, derivative Ziram, mixture with carboxamide derivative 148-79-8D, Thiabendazole, mixture 731-27-1D, mixture with carboxamide derivative with carboxamide derivative 1018-71-9D, Pyrrolnitrine, mixture with carboxamide derivative 1085-98-9D, mixture with carboxamide derivative 1332-40-7D, Copper oxychloride, mixture with 1593-77-7D, Dodemorph, mixture with carboxamide derivative carboxamide derivative 1897-45-6D, Chlorothalonil, mixture with carboxamide derivative 2425-06-1D, Captafol, mixture with carboxamide derivative 2439-10-3D, Dodine, mixture with

3347-22-6D, Dithianone, mixture with carboxamide derivative carboxamide derivative 3878-19-1D, Fuberidazole, mixture with carboxamide derivative 5234-68-4D, Carboxin, mixture with carboxamide derivative 6980-18-3D, Kasugamycin, mixture with carboxamide derivative 8018-01-7D, Mancozeb, mixture with carboxamide 9006-42-2D, Metiram, mixture with carboxamide derivative derivative Carbendazim, mixture with carboxamide derivative 12071-83-9D, Propineb, mixture with carboxamide derivative 12122-67-7D, Zineb, mixture with carboxamide derivative 12427-38-2D, Maneb, mixture with carboxamide derivative 13598-36-2D, Phosphonic acid, mixture with carboxamide derivative 17109-49-8D, Edifenphos, mixture with carboxamide derivative 17804-35-2D, Benomyl, mixture with carboxamide derivative 20427-59-2D, Copper hydroxide, mixture with carboxamide derivative 23564-05-8D, Thiophanatemethyl, mixture with carboxamide derivative 23564-06-9D, Thiophanateethyl, mixture with carboxamide derivative 24579-73-5D, Propamocarb, mixture with carboxamide derivative Propamocarbhydrochloride, mixture with carboxamide derivative 27605-76-1D, Probenazole, mixture with carboxamide derivative 32809-16-8D, Procymidone, mixture with carboxamide derivative 36734-19-7D, Iprodione, mixture with carboxamide derivative 39148-24-8D, FosetylAl, mixture with carboxamide derivative 41814-78-2D, Tricyclazole, mixture with carboxamide derivative 43121-43-3D, 50471-44-8D, Vinclozolin, Triadimefon, mixture with carboxamide derivative mixture with carboxamide derivative 50512-35-1D, Isoprothiolane, mixture with carboxamide derivative 51832-87-2D, Picobenzide, mixture with carboxamide derivative 53112-28-0D, mixture with carboxamide derivative 55179-31-2D, Bitertanol, mixture with carboxamide derivative 55219-65-3D, Triadimenol, mixture with carboxamide derivative 57520-17-9D, Iminoctadine triacetate, mixture with carboxamide derivative 57966-95-7D, Cymoxanil, mixture with carboxamide derivative 60207-31-0D, Azaconazole, mixture with carboxamide derivative 60207-90-1D, Propiconazole, mixture with carboxamide derivative 60207-93-4D, Etaconazole, mixture with carboxamide derivative 65571-68-8D, Clorofenazole, mixture with carboxamide derivative 66063-05-6D, Pencycuron, mixture with carboxamide derivative 66246-88-6D, Penconazole, mixture with carboxamide derivative 67564-91-4D, Fenpropimorph, mixture with carboxamide derivative 67747-09-5D, Prochloraz, mixture with carboxamide derivative 69516-34-3D, mixture with carboxamide derivative 70630-17-0D, Metalaxyl-M, mixture with carboxamide derivative 72459-58-6D, Triazoxide, mixture with carboxamide derivative 74738-17-3D, Fenpiclonil, mixture with carboxamide derivative 76674-21-0D, Flutriafol, mixture with carboxamide derivative 77732-09-3D, Oxadixyl, mixture with carboxamide derivative 79048-45-6D, mixture with carboxamide derivative 79622-59-6D, Fluazinam, mixture with carboxamide 79983-71-4D, Hexaconazole, mixture with carboxamide derivative derivative 81412-43-3D, Tridemorph, mixture with carboxamide derivative 85509-19-9D, 87130-20-9D, Diethofencarb, Flusilazole, mixture with carboxamide derivative mixture with carboxamide derivative 88671-89-0D, Myclobutanil, mixture with carboxamide derivative 89269-64-7D, Ferimzone, mixture with carboxamide derivative 91315-15-0D, Aldimorph, mixture with carboxamide derivative 94361-06-5D, Cyproconazole, mixture with carboxamide derivative 97716-85-3D, mixture with carboxamide derivative 98243-83-5D, Benalaxyl-M, mixture with carboxamide derivative 101903-30-4D, Pefurazoate, mixture with carboxamide derivative 103970-75-8D, Quinconazole, mixture with carboxamide derivative 107534-96-3D, Tebuconazole, Carpropamid, mixture with carboxamide derivative mixture with carboxamide derivative 108173-90-6D, Guazatine, mixture with carboxamide derivative 110235-47-7D, mixture with carboxamide derivative 110488-70-5D, Dimethomorph, mixture with carboxamide derivative 112281-77-3D, Tetraconazole, mixture with carboxamide derivative 114369-43-6D, Fenbuconazole, mixture with carboxamide derivative 115852-48-7D, Fenoxanil, 116255-48-2D, Bromuconazole, mixture with mixture with carboxamide derivative 117428-22-5D, Picoxystrobin, mixture with carboxamide carboxamide derivative 118134-30-8D, Spiroxamine, mixture with carboxamide derivative derivative 119446-68-3D, Difenoconazole, mixture with carboxamide derivative 119899-14-8D, mixture with carboxamide derivative 120116-88-3D, Cyazofamid, mixture with carboxamide derivative 121552-61-2D, mixture with carboxamide derivative 123572-88-3D, Furametpyr, mixture with carboxamide derivative 125116-23-6D, Metconazole, mixture with carboxamide derivative 125225-28-7D, 126833-17-8D, Fenhexamid, Ipconazole, mixture with carboxamide derivative mixture with carboxamide derivative 131341-86-1D, Fludioxonil, mixture with carboxamide derivative 131752-26-6D, mixture with carboxamide derivative

```
131860-33-8D,
131807-57-3D, Famoxadone, mixture with carboxamide derivative
Azoxystrobin, mixture with carboxamide derivative 131983-72-7D, Triticonazole,
mixture with carboxamide derivative 133408-50-1D, Metominostrobin, mixture with
carboxamide derivative 133855-98-8D, Epoxiconazole, mixture with carboxamide
            135158-54-2D, Acibenzolar-S-methyl, mixture with carboxamide derivative
derivative
136426-54-5D, Fluquinconazole, mixture with carboxamide derivative
139920-32-4D, Diclocymet, mixture with carboxamide derivative
                                                                 140923-17-7D,
Iprovalicarb, mixture with carboxamide derivative 141517-21-7D,
Trifloxystrobin, mixture with carboxamide derivative 143390-89-0D,
Kresoximmethyl, mixture with carboxamide derivative 149508-90-7D,
Simeconazole, mixture with carboxamide derivative 149961-52-4D, Dimoxystrobin, mixture with carboxamide derivative 156052-68-5D, Zoxamide, mixture with carboxamide derivative 156581-89-4D, mixture with carboxamide derivative
158169-73-4D, mixture with carboxamide derivative 161326-34-7D, Fenamidone,
mixture with carboxamide derivative 162650-77-3D, Ethaboxam, mixture with
carboxamide derivative 169202-06-6D, Iminoctadine tris(albesilate), mixture
with carboxamide derivative 175013-18-0D, Pyraclostrobin, mixture with
carboxamide derivative 175217-20-6D, Silthiofam, mixture with carboxamide
derivative 178928-70-6D, Prothioconazole, mixture with carboxamide derivative
181624-76-0D, mixture with carboxamide derivative 181627-13-4D, mixture with
carboxamide derivative 183675-82-3D, Penthiopyrad, mixture with carboxamide
derivative 183676-44-0D, mixture with carboxamide derivative 187233-48-3D, mixture
with carboxamide derivative 188027-78-3D, mixture with carboxamide derivative
188425-85-6D, Boscalid, mixture with carboxamide derivative 189873-26-5D,
mixture with carboxamide derivative 210230-99-2D, mixture with carboxamide
derivative 214706-53-3D, mixture with carboxamide derivative 220899-03-6D
, Metrafenone, mixture with carboxamide derivative 221451-58-7D,
mixture with carboxamide derivative 221667-31-8D, mixture with carboxamide
            223580-51-6D, Tiadinil, mixture with carboxamide derivative
derivative
224049-04-1D, mixture with carboxamide derivative 237055-17-3D, mixture with
carboxamide derivative 248593-16-0D, Orysastrobin, mixture with carboxamide
derivative 249648-16-6D, mixture with carboxamide derivative 308286-29-5D, mixture
with carboxamide derivative 361377-29-9D, Fluoxastrobin, mixture with
carboxamide derivative 367262-88-2D, mixture with carboxamide derivative
367262-94-0D, mixture with carboxamide derivative
                                                   367262-97-3D, mixture with
carboxamide derivative 367263-03-4D, mixture with carboxamide derivative
374726-62-2D, mixture with carboxamide derivative 413615-35-7D,
                                                       424824-17-9D, mixture with
Benthiavalicarb, mixture with carboxamide derivative
carboxamide derivative 424831-80-1D, mixture with carboxamide derivative
497934-59-5D, mixture with carboxamide derivative
                                                    497934-60-8D, mixture with
carboxamide derivative 577954-87-1D, mixts. with fungicides 577954-88-2D,
                        577954-96-2D, mixts. with fungicides
mixts. with fungicides
581809-46-3D, mixts. with fungicides
                                       756523-12-3D, mixture with
carboxamide derivative 849674-14-2
                                      849674-16-4 849674-17-5
                                                                    849674-20-0
849674-22-2 849674-24-4 849674-26-6 849674-29-9 849674-31-3
849674-33-5
             849674-35-7
                            849674-38-0
                                          849674-44-8
                                                         849674-45-9
            849674-51-7 849674-54-0
                                         849674-56-2
                                                         849674-57-3
849674-48-2
849674-58-4
            849674-59-5 849674-60-8
                                         849674-61-9
                                                         849674-62-0
849674-63-1 849674-65-3 849674-67-5
                                         849674-69-7
                                                       849674-71-1
                           849674-74-4 849674-75-5 849674-76-6 849674-85-7D, mixture with carboxamide derivative
             849674-73-3 849674-74-4
849674-72-2
849674-77-7
              849674-78-8
849674-86-8D, mixture with carboxamide derivative 849674-87-9D, mixture with
carboxamide derivative 849674-88-0D, mixture with carboxamide derivative
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
   (synergistic fungicidal combination)
```

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Basf Ag; EP 0545099 A 1993 HCAPLUS
- (2) Basf Ag; EP 0589301 A 1994 HCAPLUS
- (3) Basf Ag; WO 9708952 A 1997 HCAPLUS
- (4) Basf Ag; WO 9710716 A 1997 HCAPLUS
- (5) Basf Ag; EP 1214881 A 2002 HCAPLUS
- (6) Leyendecker, J; WO 9808385 A 1998 HCAPLUS
- (7) Novartis Erfind Verwalt Gmbh; WO 9963813 A 1999 HCAPLUS
- (8) Schelberger, K; WO 9931980 A 1999 HCAPLUS
- (9) Schelberger, K; WO 9931985 A 1999 HCAPLUS

- (10) Strathmann, S; WO 9739630 A 1997 HCAPLUS
- IT 220899-03-6D, Metrafenone, mixture with carboxamide derivative RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (synergistic fungicidal combination)
- RN 220899-03-6 HCAPLUS
- CN Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6-methylphenyl)- (9CI) (CA INDEX NAME)

- L50 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
- AN 2004:796496 HCAPLUS
- DN 141:290547
- ED Entered STN: 30 Sep 2004
- TI Fungicidal compositions comprising N-phenyl-N-[4-(4-pyridyl)-2-pyrimidin-2-yl]amine derivatives
- IN Ackerman, Peter; Stierli, Daniel; Jung, Pierre Marcel Joseph; Maienfisch, Peter; Cederbaum, Fredrik Emil Malcolm; Wenger, Jean-Frederic
- PA Syngenta Participations AG, Switz.
- SO Brit. UK Pat. Appl., 112 pp. CODEN: BAXXDU
- CODEN. B.
- DT Patent
- LA English
- IC ICM A01N043-56 ICS A01N043-58
- CC 5-2 (Agrochemical Bioregulators)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 2399754	A1	20040929	GB 2004-3967	20040223
PRAI GB 2003-7269	A	20030328		
CLASS				
PATENT NO. C	LASS PATENT	FAMILY CLASS	SIFICATION CODES	
GB 2399754 I	CM A01N043	3-56		
I	CS A01N043	3-58		
GB, 2399754 E	CLA A01N043	3/58		
OS MARPAT 141:29	0547			
.GI				

Ι

```
Compns. for protecting plants, especially fungicidal compns., comprise
AB
     N-phenyl-N-[4-(4-pyridyl)-2-pyrimidin-2-yl]amine derivs. (I, R1 = halo or
     (un) substituted alkyl, alkoxy, alkenyloxy, alkynyloxy, thioalkyl, aryl,
     etc.; R2-R9 = H, (un) substituted alkyl, aryl, etc.; R10 = H,
     (un) substituted alkyl, alkenyl, etc.; R11 = H, C1-4 alkyl, C3-4 alkenyl,
     etc.; m = 0, 1, 2, or 3; n, p = 0 or 1; q = 1 or 2) or a salt thereof,
     together with a suitable carrier and optionally addnl. active compds.
     Thus, spraying 1-wk-old wheat plants 0.02% I (in a test with 7 such
     compds.) resulted in >70% control of fungal infection assessed 10 days
     after inoculation with Puccinia graminis.
ST
     pyrimidinamine phenyl pyridyl fungicide; pyridylpyrimidinamine fungicide
IT
     Fungicides
        (agrochem.; phenyl[(pyridyl)pyrimidinyl]amine derivs. as)
     175013-18-0D, Pyraclostrobin, mixts. with phenyl[(pyridyl)pyrimidinyl]amin
IT
     e derivs.
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (BAS 500F; fungicides for plant protection)
TT
     120116-88-3D, Cyazofamid, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
     derivs.
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (IKF-916; fungicides for plant protection)
     156052-68-5D, Zoxamide, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
IT
     derivs.
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (RH 7281; fungicides for plant protection)
IT
     211867-47-9D, Flumorph, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
     derivs.
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (SYP-L 190; fungicides for plant protection)
IT
     539825-11-1
                   539825-12-2
                                  539825-13-3
                                                539825-14-4
                                                               539825-15-5
     539825-16-6
                   539825-17-7
                                  539825-18-8
                                                539825-19-9
                                                               539825-20-2
                   539825-22-4
                                 539825-23-5
                                                539825-24-6
                                                               539825-25-7
     539825-21-3
                                                539825-30-4
                                                               539825-31-5
     539825-26-8
                   539825-27-9
                                  539825-29-1
                   539825-33-7
                                                539825-35-9
                                                              539825-36-0
     539825-32-6
                                  539825-34-8
     539825-37-1
                   539825-38-2
                                  539825-39-3
                                                539825-40-6
                                                               539825-42-8
     539825-43-9
                   539825-44-0
                                  539825-45-1
                                                539825-46-2
                                                               539825-47-3
     539825-48-4
                   539825-49-5
                                 539825-50-8
                                                539825-51-9
                                                               764698-02-4
     764698-08-0
                   764698-15-9
                                  764698-18-2
                                                764698-20-6
                                                               764698-23-9
                                                              764698-42-2
     764698-26-2
                   764698-28-4
                                  764698-30-8
                                                764698-38-6
                                                764698-56-8
                                                               764698-58-0
     764698-45-5
                   764698-48-8
                                  764698-51-3
                                                               764698-69-3
     764698-61-5
                   764698-63-7
                                  764698-65-9
                                                764698-67-1
                                                               764698-79-5
     764698-71-7
                   764698-73-9
                                  764698-75-1
                                                764698-77-3
     764698-81-9
                   764698-83-1
                                  764698-85-3
                                                764698-87-5
                                                               764698-89-7
     764698-91-1
                   764698-93-3
                                  764698-96-6
                                                764698-98-8
                                                               764699-00-5
     764699-02-7
                   764699-05-0
                                  764699-07-2
                                                764699-09-4
                                                               764699-12-9
                   764699-20-9
                                  764699-22-1
                                                764699-24-3
                                                               764699-26-5
     764699-15-2
     764699-28-7
                   764699-30-1
                                  764699-32-3
                                                764699-34-5
                                                               764699-36-7
                                                764699-44-7
                                                               764699-46-9
     764699-38-9
                   764699-40-3
                                  764699-42-5
                                  764699-53-8
                                                764699-55-0
                                                               764699-57-2
     764699-48-1
                   764699-51-6
                                  764699-63-0
                                                764699-65-2
                                                               764699-67-4
     764699-59-4
                   764699-61-8
     764699-69-6
                   764699-71-0
                                  764699-73-2
                                                764699-75-4
                                                               764699-77-6
                   764699-81-2
                                  764699-83-4
                                                764699-85-6
                                                               764699-87-8
     764699-79-8
     764699-89-0
                   764699-91-4
                                  764699-93-6
                                                764699-95-8
                                                               764699-97-0
                                                               764700-07-4
                   764700-01-8
                                  764700-03-0
                                                764700-05-2
     764699-99-2
                                                               764700-17-6
     764700-09-6
                   764700-11-0
                                  764700-13-2
                                                764700-15-4
     764700-19-8
                   764700-21-2
                                  764700-23-4
                                                764700-25-6
                                                               764700-27-8
                                                764700-35-8
                                                               764700-37-0
                                  764700-33-6
     764700-29-0
                   764700-31-4
                                  764700-43-8
                                                764700-45-0
                                                               764700-47-2
     764700-39-2
                   764700-41-6
                                  764700-53-0
     764700-49-4
                   764700-51-8
                                                764700-55-2
                                                               764700-58-5
     764700-61-0
                   764700-63-2
                                  764700-66-5
                                                764700-68-7
                                                               764700-70-1
                   764700-74-5
                                  764700-76-7
                                                764700-78-9
                                                               764700-80-3
```

764700-72-3

```
764700-91-6
     764700-82-5
                  764700-84-7
                                 764700-86-9
                                               764700-88-1
    764700-93-8
                  764700-95-0
                                 764700-97-2
                                               764700-99-4
                                                             764701-01-1
    764701-03-3
                  764701-05-5
                                 764701-07-7
                                               764701-09-9
                                                             764701-11-3
                                                             764701-21-5
    764701-13-5
                  764701-15-7
                                 764701-17-9
                                               764701-19-1
                                               764701-29-3
                                                             764701-31-7
     764701-23-7
                  764701-25-9
                                 764701-27-1
                                 764701-37-3
                                               764701-39-5
                                                             764701-41-9
     764701-33-9
                  764701-35-1
                                               764701-51-1
     764701-44-2
                  764701-47-5
                                 764701-49-7
                                                             764701-53-3
    764701-55-5
                  764701-58-8
                                764701-61-3
                                               764701-63-5
                                                             764701-66-8
                                764701-73-7
                                               764701-75-9 764701-77-1
    764701-69-1
                  764701-71-5
    764701-79-3
                  764701-81-7
    RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (as fungicide for plant protection)
TT
    82-68-8D, Quintozene, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
            87-41-2D, Phthalide, mixts. with phenyl[(pyridyl)pyrimidinyl]ami
                 99-30-9D, Dicloran, mixts. with phenyl[(pyridyl)pyrimidinyl]a
    ne derivs.
    mine derivs.
                   101-05-3D, Anilazine, mixts. with
                                                117-80-6D, Dichlone, mixts.
    phenyl[(pyridyl)pyrimidinyl]amine derivs.
    with phenyl[(pyridyl)pyrimidinyl]amine derivs. 133-06-2D, Captan, mixts.
    with phenyl [(pyridyl)pyrimidinyl]amine derivs. 133-07-3D, Folpet, mixts.
    with phenyl[(pyridyl)pyrimidinyl]amine derivs. 137-26-8D, Thiram, mixts.
    with phenyl[(pyridyl)pyrimidinyl]amine derivs. 137-30-4D, Ziram, mixts.
    with phenyl [(pyridyl)pyrimidinyl]amine derivs.
                                                     148-79-8D, Thiabendazole,
                                                             668-34-8D, Fentin,
    mixts. with phenyl ((pyridyl) pyrimidinyl) amine derivs.
                                                             731-27-1D,
    mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
    Tolylfluanid, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
    1085-98-9D, Dichlofluanid, mixts. with [(pyridyl)pyrimidinyl]amine derivs.
    1317-39-1D, Cuprous oxide, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
              1332-40-7D, Copper oxychloride, mixts. with ridyl)pyrimidinyl]amine derivs. 1593-77-7D, Dodemorph, mixts.
    phenyl[(pyridyl)pyrimidinyl]amine derivs.
    with phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                      1897-45-6D,
    Chlorothalonil, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
    2079-00-7D, Blasticidin-S, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
             2425-06-1D, Captafol, mixts. with phenyl[(pyridyl)pyrimidinyl]am
    derivs.
    ine derivs.
                 2439-01-2D, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
    derivs. 2439-10-3D, Dodine, mixts. with phenyl[(pyridyl)pyrimidinyl]amin
    e derivs. 2593-15-9D, Etridiazole, mixts. with
    phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                2675-77-6D, Chloroneb, mixts.
    with phenyl[(pyridyl)pyrimidinyl]amine derivs. 3347-22-6D, Dithianon,
    mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                             3878-19-1D,
    Fuberidazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
    5221-53-4D, Dimethirimol, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
    derivs.
              5234-68-4D, Carboxin, mixts. with phenyl[(pyridyl)pyrimidinyl]am
                  5259-88-1D, Oxycarboxin, mixts. with
    ine derivs.
    phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                               6980-18-3D, Kasugamycin,
    mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                             7704-34-9D,
    Sulfur, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
    7758-98-7D, Copper sulfate, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
              8011-63-0D, Bordeaux mixture, mixts. with
                                                8018-01-7D, Mancozeb, mixts.
    phenyl[(pyridyl)pyrimidinyl]amine derivs.
    with phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                     9006-42-2D, Metiram,
    mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
    Hymexazol, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
    10380-28-6D, Oxine-copper, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
              10552-74-6D, Nitrothal-isopropyl, mixts. with
    phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                10605-21-7D, Carbendazim,
    mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 11113-80-7D,
    Polyoxin, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
    12071-83-9D, Propineb, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
             12122-67-7D, Zineb, mixts. with phenyl[(pyridyl)pyrimidinyl]amin
    derivs.
    e derivs.
                12427-38-2D, Maneb, mixts. with phenyl[(pyridyl)pyrimidinyl]am
                  12771-68-5D, Ancymidol, mixts. with
    ine derivs.
                                               13457-18-6D, Pyrazophos,
    phenyl[(pyridyl)pyrimidinyl]amine derivs.
    mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                             13516-27-3D.
    Iminoctadine, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
    14484-64-1D, Ferbam, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
```

17109-49-8D, Edifenphos, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 17804-35-2D, Benomyl, mixts. with phenyl[(pyridyl)pyrimidinyl]am 20427-59-2D, Copper hydroxide, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 23947-60-6D, Ethirimol, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 24201-58-9D, Dichlozoline, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 24579-73-5D, Propamocarb, mixts. with phenyl[(pyridyl)pyrimidinyl]amine 24691-80-3D, Fenfuram, mixts. with phenyl[(pyridyl)pyrimidinyl]a derivs. 26087-47-8D, Iprobenfos, mixts. with mine derivs. phenyl[(pyridyl)pyrimidinyl]amine derivs. 26644-46-2D, Triforine, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 27605-76-1D, Probenazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 32809-16-8D, Procymidone, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 35554-44-0D, Imazalil, mixts. with phenyl[(pyridyl)pyrimidinyl]amine 36519-00-3D, Phosdiphen, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 36734-19-7D, Iprodione, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 39148-24-8D, Fosetylaluminum, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 39300-45-3D, Dinocap, mixts. with phenyl[(pyridyl)pyrimidinyl]amine 41205-21-4D, Fluoromide, derivs., mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 41483-43-6D, Bupirimate, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 41814-78-2D, Tricyclazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 43121-43-3D, Triadimefon, mixts. with phenyl[(pyridyl)pyrimidinyl]amine 50471-44-8D, Vinclozolin, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 50512-35-1D, Isoprothiolane, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 50642-14-3D, Validamycin, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 53112-28-0D, Pyrimethanil, mixts. with phenyl[(pyridyl)pyrimidinyl]amine 53988-93-5D, Mancopper, mixts. with derivs. phenyl[(pyridyl)pyrimidinyl]amine derivs. 54864-61-8D, Myclozolin, mixts. with phenyl [(pyridyl) pyrimidinyl] amine derivs. 55179-31-2D, Bitertanol, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 55219-65-3D, Triadimenol, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 55814-41-0D, Mepronil, mixts. with phenyl[(pyridyl)pyrimidinyl]a mine derivs. 57018-04-9D, Tolclofos-methyl, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 57369-32-1D, Pyroquilon, 57646-30-7D, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. Furalaxyl, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 57837-19-1D, Metalaxyl, mixts. with phenyl[(pyridyl)pyrimidinyl]amine 57966-95-7D, Cymoxanil, mixts. with derivs. phenyl[(pyridyl)pyrimidinyl]amine derivs. 58810-48-3D, Ofurace, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 60168-88-9D, Fenarimol, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 60207-31-0D, Azaconazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 60207-90-1D, Propiconazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 62732-91-6D, Debacarb, mixts. with phenyl[(pyridyl)pyrimidinyl]a mine derivs. 62865-36-5D, Diclomezine, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 63284-71-9D, Nuarimol, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 66063-05-6D, Pencycuron, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. Penconazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 66332-96-5D, Flutolanil, mixts. with phenyl[(pyridyl)pyrimidinyl]amine 66952-49-6D, Methasulfocarb, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 67306-00-7D, Fenpropidine, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 67564-91-4D, Fenpropimorph, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 67747-09-5D, Prochloraz, mixts. with phenyl[(pyridyl)pyrimidinyl]amine 68694-11-1D, Triflumizole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 70630-17-0D, R-Metalaxyl, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 71626-11-4D, Benalaxyl, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 72459-58-6D, Triazoxide, mixts. with phenyl[(pyridyl)pyrimidinyl]amine 74738-17-3D, Fenpiclonil, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 76674-21-0D, Flutriafol, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 77732-09-3D,

```
Oxadixyl, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
79622-59-6D, Fluazinam, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
         79983-71-4D, Hexaconazole, mixts. with
phenyl[(pyridyl)pyrimidinyl]amine derivs. 81412-43-3D, Tridemorph,
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                      83657-24-3D,
Diniconazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
84332-86-5D, Chlozolinate, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
         85509-19-9D, Flusilazole, mixts. with
derivs.
phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                           86598-92-7D, Imibenconazole,
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                      87130-20-9D,
Diethofencarb, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
88283-41-4D, Pyrifenox, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
        88671-89-0D, Myclobutanil, mixts. with
phenyl[(pyridyl)pyrimidinyl]amine derivs. 89269-64-7D, Ferimzone, mixts.
with phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                94361-06-5D,
Cyproconazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
101903-30-4D, Pefurazoate, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
         106917-52-6D, Flusulfamide, mixts. with
phenyl[(pyridyl)pyrimidinyl]amine derivs. 107534-96-3D, Tebuconazole,
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                      108173-90-6D,
Guazatine, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
110235-47-7D, Mepanipyrim, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
        110488-70-5D, Dimethomorph, mixts. with
phenyl[(pyridyl)pyrimidinyl]amine derivs. 112281-77-3D, Tetraconazole,
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 114369-43-6D,
Fenbuconazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
115852-48-7D, Fenoxanil, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
derivs. 116255-48-2D, Bromuconazole, mixts. with
phenyl[(pyridyl)pyrimidinyl]amine derivs. 117428-22-5D, Picoxystrobin,
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 118134-30-8D,
Spiroxamine, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
119446-68-3D, Difenoconazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amin
          121552-61-2D, Cyprodinil, mixts. with
phenyl[(pyridyl)pyrimidinyl]amine derivs. 124495-18-7D, Quinoxyfen,
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 125116-23-6D,
Metconazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
125225-28-7D, Ipconazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
         126833-17-8D, Fenhexamid, mixts. with
phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                           131341-86-1D, Fludioxonil,
                                                      131807-57-3D,
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
Famoxadone, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
131860-33-8D, Azoxystrobin, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
         131983-72-7D, Triticonazole, mixts. with
phenyl[(pyridyl)pyrimidinyl]amine derivs. 133408-50-1D, Metominostrobin,
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 133855-98-8D,
Epoxiconazole, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
135158-54-2D, Acibenzolar-S-methyl, mixts. with
phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                           136426-54-5D, Fluquinconazole,
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                      140923-17-7D,
Iprovalicarb, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
141517-21-7D, Trifloxystrobin, mixts. with phenyl[(pyridyl)pyrimidinyl]ami
            143390-89-0D, Kresoxim-methyl, mixts. with
ne derivs.
phenyl[(pyridyl)pyrimidinyl]amine derivs. 149508-90-7D, Simeconazole,
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 149961-52-4D,
SSF-129, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
161326-34-7D, Fenamidone, mixts. with phenyl[(pyridyl)pyrimidinyl]amine
derivs. 162650-77-3D, Ethaboxam, mixts. with
phenyl[(pyridyl)pyrimidinyl]amine derivs. 180409-60-3D, Cyflufenamid,
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                                      188425-85-6D,
Nicobifen, mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs.
220899-03-6D, Metrafenone, mixts. with
                                           413615-35-7D, Benthiavalicarb,
phenyl[(pyridyl)pyrimidinyl]amine derivs.
mixts. with phenyl[(pyridyl)pyrimidinyl]amine derivs. 764701-83-9D,
derivs. and their salts and mixts.
                                    764701-85-1D, derivs. and their salts
             765295-67-8D, BAY 14120, mixts. with
and mixts.
phenyl[(pyridyl)pyrimidinyl]amine derivs.
                                          765295-78-1D, BAS 520, mixts.
```

```
with phenyl[(pyridyl)pyrimidinyl]amine derivs.
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (fungicides for plant protection)
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Anon; WO 2001093682 A1
(2) Anon; WO 2002053560 A1
(3) Anon; WO 2003047347.A1
IT
     220899-03-6D, Metrafenone, mixts. with
     phenyl[(pyridyl)pyrimidinyl]amine derivs.
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (fungicides for plant protection)
RN
     220899-03-6 HCAPLUS
     Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6-
CN
     methylphenyl) - (9CI) (CA INDEX NAME)
```

```
L50 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN
      2004:13010 HCAPLUS
 DN
      140:351974
      Entered STN: 08 Jan 2004
 ED
      New molecules at CIMA 2003: 6 fungicides and 1 insecticide
 ΤI
 AU
      Michel, Philippe
. CS
      UIPP (Union des industries de la protection des plantes), Fr.
 SO
      Phytoma (2003), 566, 33-35
      CODEN: PYTOAU; ISSN: 1164-6993
 PB
      Editions Le Carrousel
      Journal; General Review
 DT
 LА
 CC
      5-0 (Agrochemical Bioregulators)
      A review. During the international conference on farming diseases (CIMA)
 AB
      organized by the French Plant Protection Association (AFPP) in Tours during
      this month of Dec., seven mols. are being presented, i.e. 4 fungicides
      presented in 2003 for the very first time, along with 2 fungicides and an
      insecticide already presented in 2002. The new fungicides are as follows:
      benthiavalicarb-iso-Pr created by Kumiai and Ihara, developed by Cerexagri
      and Certis; boscalid by BASF, dimoxystrobin by BASF, metrafenon
      by BASF. The two other fungicides are prothioconazol and fluoxastrobin,
      both produced by Bayer CropScience. The insecticide in question is
      clothianidin, created by Takeda and developed by Bayer CropScience in
      particular.
 ST
      review fungicide insecticide CIMA
      Insecticides
 IT
         (6 fungicides and 1 insecticide presented at CIMA 2003)
 TΤ
      Fungicides
         (agrochem.; 6 fungicides and 1 insecticide presented at CIMA 2003)
                                                178928-70-6, Prothioconazole
      149961-52-4, Dimoxystrobin 177406-68-7
 IT
      188425-85-6, Boscalid
                             210880-92-5, Clothianidin 220899-03-6,
      Metrafenone
                    361377-29-9, Fluoxastrobin
      RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
         (6 fungicides and 1 insecticide presented at CIMA 2003)
 IT
      220899-03-6, Metrafenone
      RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
```

(6 fungicides and 1 insecticide presented at CIMA 2003)

Methanone, (3-bromo-6-methoxy-2-methylphenyl) (2,3,4-trimethoxy-6-

220899-03-6 HCAPLUS

methylphenyl) - (9CI) (CA INDEX NAME)

RN CN

```
Me
                 OMe
                      OMe
                      OMe
  OMe
          Me
     ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
     2003:242097 HCAPLUS
AN
DN
     138:267201
     Entered STN: 28 Mar 2003
ED
     Pesticidal compositions for coating plant propagation material containing
TI
     anthranilamides
     Berger, Richard Alan; Flexner, John Lindsey
IN
     E. I. Du Pont de Nemours & Co., USA
PA
so
     PCT Int. Appl., 147 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
TC
     ICM A01N043-56
     5-4 (Agrochemical Bioregulators)
CC
     Section cross-reference(s): 28
FAN.CNT 1
                                               APPLICATION NO.
                                                                        DATE
     PATENT NO.
                          KIND
                                  DATE
                                               _____
                                                                        _____
     -----
                          ----
                                  -----
                                  20030327
                                               WO 2002-US30302
                                                                       20020910
PΙ
     WO 2003024222
                           A1
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2458163
                                  20030327
                                              CA 2002-2458163
                                                                        20020910
                           AΑ
                                  20040616
                                               EP 2002-775972
                                                                        20020910
     EP 1427285
                           A1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     BR 2002012993
                            Α
                                  20040817
                                               BR 2002-12993
                                                                        20020910
                                               JP 2003-528126
                                                                        20020910
     JP 2005502716
                           T2
                                  20050127
     ZA 2004000413
                           Α
                                  20050120
                                               ZA 2004-413
                                                                        20040120
     US 2004209923
                                  20041021
                                               US 2004-485125
                                                                        20040126
                           A1
                            Р
                                  20010921
PRAI US 2001-323941P
     WO 2002-US30302
                            W
                                  20020910
CLASS
                         PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                  CLASS
 WO 2003024222
                  ICM
                         A01N043-56
                  ECLA
                         A01N043/56
 WO 2003024222
 JP 2005502716
                  FTERM
                         4H011/AC01; 4H011/BA01; 4H011/BB09; 4H011/BC07;
                         4H011/BC08; 4H011/BC18; 4H011/BC19; 4H011/BC20;
                         4H011/DA02; 4H011/DA15; 4H011/DA16; 4H011/DH03;
                          4H011/DH10
                  NCL.
                         514/341.000
 US 2004209923
```

os MARPAT 138:267201 GΙ

An invertebrate pest control composition for coating a propagule comprises (1) AB a biol. effective amount of an anthranilamide compds. I (Markush included), an N-oxide thereof or an agriculturally suitable salt thereof, and (2) a film former or adhesive agent. Arthropodicidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones, γ-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, and fungicides. The propagule is a seed of cotton, maize, soybean, rice, etc., or a rhizome, tuber, bulb or corm, or viable division thereof, of potato, sweet potato, garden onion, tulip, daffodil, crocus hyacinth, etc., or is a stem or leaf ST arthropodicide insecticide anthranilamide prepn propagule seed IT Insecticides (carbamate; in pesticidal compns. for plant propagation material containing anthranilamides)

IT

(cutting; pesticidal compns. containing anthranilamides for treatment of)

IT Eubacteria

Fungi

Virus

(entomopathogenic; in pesticidal compns. for plant propagation material containing anthranilamides)

Adhesives IT

Bacillus thuringiensis aizawai

Bacillus thuringiensis kurstaki

Baculoviridae

Coating materials

Fungicides

GABA antagonists

Gums and Mucilages

Latex

Sodium channel blockers

(in pesticidal compns. for plant propagation material containing anthranilamides)

Macrolides

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(in pesticidal compns. for plant propagation material containing anthranilamides)

·IT Acrylic polymers, biological studies

RL: AGR (Agricultural use); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)

(in pesticidal compns. for plant propagation material containing anthranilamides)

```
IT
     Fats and Glyceridic oils, biological studies
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
ΙT
     Gelatins, biological studies
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
     Oils
IT
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
IT
     Polyoxyalkylenes, biological studies
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
     Polysaccharides, biological studies
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
ΙT
     Proteins
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
TТ
     Shellac
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
TT
     Waxes
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
TТ
     Zeins
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
IT
     Juvenile hormones
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (mimics; in pesticidal compns. for plant propagation material containing
        anthranilamides)
IT
     Cucumis melo
        (muskmelon; pesticidal compns. containing anthranilamides for plant
        propagation material of)
IT
     Insecticides
        (neonicotinoid; in pesticidal compns. for plant propagation material
        containing anthranilamides)
IT
    Allium cepa
        (ornamental; pesticidal compns. containing anthranilamides for plant
        propagation material of)
IT
    Achillea
    Allium cepa
    Anemone
    Antirrhinum
    Arachis hypogaea
    Armeria
    Avena sativa
```

```
Begonia tuberhybrida
Beta vulgaris
Brassica campestris rapa
Brassica juncea
Brassica nigra
Brassica oleracea capitata
Calla
Capsicum
Chionodoxa
Chrysanthemum
Citrullus lanatus
Coleus
Cosmos (plant)
Crocus (plant)
Cucumis sativus
Cucurbita
Cyclamen
Dahlia (plant)
Daucus carota
Dioscorea '
Freesia
Geranium (horticultural common name)
Gerbera
Gladiolus
Gloxinia (genus)
Glycine max
Gossypium hirsutum
Gypsophila elegans
Helianthus annuus
 Hordeum vulgare
Hyacinthus orientalis
Impatiens
Ipomoea batatas
Iris (plant)
Lactuca sativa
Liatris spicata
Lilium
Linum usitatissimum
Lisianthus
Lycopersicon esculentum
Marigold
Medicago sativa
Muscari racemosum
Narcissus
Nicotiana tabacum
Oryza sativa
Oxalis corniculata
Petunia
Phaseolus lunatus
Phaseolus vulgaris
Pisum sativum
Puschkinia libanotica
Rapeseed
Scabiosa atropurpurea
Secale cereale
Solanum melongena
Solanum tuberosum
Sorghum bicolor
Squill (plant)
  Triticum turgidum durum
Tulipa
Vicia faba
Viola wittrockiana
Zea mays
Zinnia
Zizania
```

```
(pesticidal compns. containing anthranilamides for plant propagation
        material of)
IT
     Bulb (plant)
     Seed
     Stem
     Tuber (plant organ)
        (pesticidal compns. containing anthranilamides for treatment of)
IT
     Pyrethrins
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (pyrethroids; in pesticidal compns. for plant propagation material
        containing anthranilamides)
IT
     Stem
        (rhizome; pesticidal compns. containing anthranilamides for treatment of)
IT
     Toxins
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (\delta-endotoxins; in pesticidal compns. for plant propagation
        material containing anthranilamides)
                                                362637-56-7
                                                               362637-57-8
IT
     362637-52-3
                   362637-54-5
                                  362637-55-6
     362637-58-9
                   362637-59-0
                                  362637-60-3
                                                362637-61-4
                                                               362637-62-5
                                  362637-65-8
                                                362637-66-9
                                                               362637-67-0
                   362637-64-7
     362637-63-6
     362637-68-1
                   362637-69-2
                                  362637-71-6
                                                362637-72-7
                                                               362637-73-8
                                                362637-77-2
                                                              362637-78-3
     362637-74-9
                   362637-75-0
                                  362637-76-1
                   362637-80-7
                                  362637-81-8
                                                362637-82-9
                                                               362637-83-0
     362637-79-4
                                  362637-86-3
                                                362637-87-4
                                                               362637-88-5
     362637-84-1
                   362637-85-2
                                                362637-92-1
                                                               362637-93-2
     362637-89-6
                   362637-90-9
                                  362637-91-0
     362637-94-3
                   362637-95-4
                                  362637-96-5
                                                362637-97-6
                                                               362637-98-7
                                  362638-03-7
                                                362638-04-8
                                                               362638-05-9
     362637-99-8
                   362638-00-4
                                  362638-08-2
                                                362638-09-3
                                                               362638-10-6
     362638-06-0
                   362638-07-1
                   362638-12-8
                                  362638-13-9
                                                362638-14-0
                                                               362638-15-1
     362638-11-7
     362638-16-2
                   362638-17-3
                                  362638-18-4
                                                362638-19-5
                                                               362638-20-8
                                                362638-24-2
                                                               362638-25-3
     362638-21-9
                   362638-22-0
                                  362638-23-1
     362638-26-4
                   362638-27-5
                                  362638-28-6
                                                362638-29-7
                                                               362638-31-1
                                                               362638-36-6
     362638-32-2
                   362638-33-3
                                  362638-34-4
                                                362638-35-5
     362638-37-7
                   362638-38-8
                                                               362638-41-3
                                  362638-39-9
                                                362638-40-2
     362638-42-4
                   362638-43-5
                                  362638-44-6
                                                362638-45-7
                                                               362638-46-8
                                                362638-50-4
                                                               362638-51-5
     362638-47-9
                   362638-48-0
                                  362638-49-1
     362638-52-6
                   362638-53-7
                                  362638-54-8
                                                362638-55-9
                                                               362638-56-0
                                  362638-59-3
                                                362638-60-6
                                                               362638-63-9
     362638-57-1
                   362638-58-2
                                                362638-67-3
                                                               362638-68-4
     362638-64-0
                   362638-65-1
                                  362638-66-2
                   362638-70-8
                                  362638-71-9
                                                362638-72-0
                                                               362638-73-1
     362638-69-5
                   362638-75-3
                                  362638-76-4
                                                362638-77-5
                                                               362638-78-6
     362638-74-2
                                                362638-82-2
                                                               362638-83-3
     362638-79-7
                   362638-80-0
                                  362638-81-1
                   362638-85-5
                                  362638-86-6
                                                362638-87-7
                                                               362638-88-8
     362638-84-4
                   362638-90-2
                                  362638-91-3
                                                362638-92-4
                                                               362638-93-5
     362638-89-9
                                                362638-97-9
                   362638-95-7
                                  362638-96-8
                                                               362638-98-0
     362638-94-6
                   362639-00-7
                                  362639-01-8
                                                362639-02-9
                                                               362639-03-0
     362638-99-1
     362639-04-1
                   362639-05-2
                                  362639-06-3
                                                362639-07-4
                                                               362639-09-6
                   362639-11-0
                                                362639-13-2
                                                               362639-14-3
                                  362639-12-1
     362639-10-9
     362639-15-4
                   362639-16-5
                                  362639-17-6
                                                362639-18-7
                                                               362639-19-8
     362639-20-1
                   362639-21-2
                                  362639-22-3
                                                362639-23-4
                                                               362639-25-6
                   362639-27-8
                                  362639-28-9
                                                362639-29-0
                                                               362639-30-3
     362639-26-7
                                                               362639-35-8
     362639-31-4
                   362639-32-5
                                  362639-33-6
                                                362639-34-7
     362639-36-9
                   362639-37-0
                                  362639-38-1
                                                362639-40-5
                                                               362639-41-6
                   362639-43-8
                                                362639-45-0
                                                               362639-46-1
     362639-42-7
                                  362639-44-9
                                                362639-50-7
                                                               362639-51-8
     362639-47-2
                   362639-48-3
                                  362639-49-4
     362639-52-9
                   362639-53-0
                                  362639-54-1
                                                362639-55-2
                                                               362639-56-3
                                  362639-59-6
                                                362639-60-9
                                                               362639-61-0
     362639-57-4
                   362639-58-5
                                  362639-65-4
                                                362639-66-5
                                                               362639-67-6
     362639-63-2
                   362639-64-3
                                                362639-71-2
                                                               362639-73-4
     362639-68-7
                   362639-69-8
                                  362639-70-1
                   362639-75-6
                                  362639-76-7
                                                362639-77-8
                                                               362639-78-9
     362639-74-5
     362639-79-0
                   362639-80-3
                                  362639-81-4
                                                362639-82-5
                                                               362639-85-8
                   362640-65-1
                                                500005-52-7
                                                               500005-53-8
                                  500005-50-5
     362640-64-0
                                                500005-57-2
                                                               500005-58-3
     500005-54-9
                   500005-55-0
                                  500005-56-1
                                                               500005-70-9
     500005-59-4
                   500005-64-1
                                  500005-65-2
                                                500005-69-6
```

```
500005-71-0
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (anthranilamide compds. as pesticides for plant propagation material)
                                                 500005-75-4
                                                                500005-76-5
IT
     500005-72-1
                    500005-73-2
                                  500005-74-3
                                   500005-79-8
     500005-77-6
                                                 500005-80-1
                                                                500005-81-2
                    500005-78-7
                                                 500005-86-7
                                                                500005-87-8
     500005-82-3
                    500005-84-5
                                   500005-85-6
                                                                500005-95-8
     500005-88-9
                    500005-89-0
                                  500005-90-3
                                                 500005-94-7
                    500005-98-1
                                                 500006-00-8
                                                                500006-01-9
     500005-97-0
                                  500005-99-2
     500006-02-0
                    500006-03-1
                                   500006-04-2
                                                 500006-05-3
                                                                500006-06-4
                                                                500006-11-1
                                                 500006-10-0
     500006-07-5
                    500006-08-6
                                   500006-09-7
     500006-12-2
                    500006-13-3
                                   500006-14-4
                                                 500006-15-5
                                                                500006-16-6
                                   500006-19-9
                                                 500006-20-2
                                                                500006-21-3
     500006-17-7
                    500006-18-8
                                                 500006-25-7
                                                                500006-26-8
                    500006-23-5
     500006-22-4
                                  500006-24-6
                                                 500006-31-5
     500006-27-9
                    500006-29-1
                                  500006-30-4
                                                                500006-32-6
                    500006-34-8
                                  500006-35-9
                                                 500006-36-0
                                                                500006-37-1
     500006-33-7
                                                                500006-47-3
                   500006-41-7
                                  500006-43-9
                                                 500006-45-1
     500006-39-3
                                                                500006-53-1
     500006-49-5
                    500006-50-8
                                   500006-51-9
                                                 500006-52-0
     500006-54-2
                    500006-55-3
                                   500006-56-4
                                                 500006-57-5
                                                                500006-58-6
                                                                500006-63-3
     500006-59-7
                    500006-60-0.
                                  500006-61-1
                                                 500006-62-2
                                                                500006-68-8
     500006-64-4
                    500006-65-5
                                   500006-66-6
                                                 500006-67-7
                                                 500006-72-4
                                                                500006-73-5
     500006-69-9
                    500006-70-2
                                   500006-71-3
                                                 500006-78-0
                                                                500006-79-1
                    500006-75-7
                                   500006-76-8
     500006-74-6
     500006-80-4
                    500006-81-5
                                   500006-82-6
                                                 500006-83-7
                                                                500006-84-8
                                                 500006-88-2
                                                                500006-89-3
     500006-85-9
                    500006-86-0
                                   500006-87-1
                   500006-91-7
                                  500006-92-8
                                                 500006-93-9
                                                                500006-94-0
     500006-90-6
                                   500006-97-3
                                                 500006-98-4
                                                                500006-99-5
     500006-95-1
                    500006-96-2
                                                 500007-03-4
                                                                500007-04-5
     500007-00-1
                   500007-01-2
                                  500007-02-3
                    500007-07-8
                                  500007-08-9
                                                 500007-09-0
                                                                500007-10-3
     500007-05-6
                    500007-12-5
                                   500007-13-6
                                                 500007-14-7
                                                                500007-15-8
     500007-11-4
                                                                500007-23-8
                                  500007-20-5
                                                 500007-21-6
     500007-16-9
                    500007-17-0
                                                 500007-28-3
                                                                500007-29-4
     500007-25-0
                    500007-26-1
                                   500007-27-2
     500007-30-7
                    500007-31-8
                                   500007-32-9
                                                 500007-33-0
                                                                500007-34-1
                                                 500007-38-5
                                                                500007-39-6
     500007-35-2
                                   500007-37-4
                   500007-36-3
     500007-40-9
                    500007-41-0
                                   500007-42-1
                                                 500007-43-2
                                                                500007-44-3
                                                 500007-48-7
                                                                500007-49-8
     500007-45-4
                    500007-46-5
                                   500007-47-6
     500007-50-1
                                  500007-53-4
                                                 500007-54-5
                                                                500007-55-6
                    500007-51-2
                                   500007-58-9
                                                 500007-59-0
                                                                500007-60-3
     500007-56-7
                    500007-57-8
                                                                500007-65-8
     500007-61-4
                    500007-62-5
                                   500007-63-6
                                                 500007-64-7
     500007-67-0
                    500007-68-1
                                  500007-69-2
                                                 500007-70-5
                                                                500007-71-6
                                  500007-74-9
                                                 500007-75-0
                                                                500007-76-1
     500007-72-7
                    500007-73-8
                    500007-78-3
                                  500007-80-7
                                                 500007-81-8
                                                                500007-82-9
     500007-77-2
     500007-83-0
                    500007-84-1
                                   500007-85-2
                                                 500007-87-4
                                                                500007-88-5
                    500007-90-9
     500007-89-6
                                   500007-91-0
                                                 500007-92-1
                                                                500007-93-2
                                   500007-96-5
                                                                500008-02-6
                                                 500007-97-6
     500007-94-3
                    500007-95-4
                                                                500008-07-1
     500008-03-7
                    500008-04-8
                                   500008-05-9
                                                 500008-06-0
     500008-10-6
                    500008-11-7
                                   500008-12-8
                                                 500008-14-0
                                                                500008-18-4
                                                                500008-25-3
                                   500008-21-9
                                                 500008-23-1
     500008-19-5
                    500008-20-8
     500008-27-5
                    500008-29-7
                                   500008-30-0
                                                 500008-32-2
                                                                500008-34-4
     500008-35-5
                    500008-36-6
                                   500008-37-7
                                                 500008-39-9
                                                                500008-41-3
                                   500008-49-1
                                                 500008-51-5
                                                                500008-53-7
     500008-42-4
                   500008-47-9
     500008-54-8
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (anthranilamide compds. as pesticides for plant propagation material)
TT
     500008-55-9
                    500008-56-0
                                   500008-57-1
                                                 500008-58-2
                                                                500008-59-3
     500008-64-0
                    500008-66-2
                                   500008-67-3
                                                 500008-68-4
                                                                500008-69-5
                                                                500008-74-2
                    500008-71-9
                                   500008-72-0
                                                 500008-73-1
     500008-70-8
                                                 500008-79-7
                                                                500008-80-0
                                   500008-77-5
     500008-75-3
                   500008-76-4
                                                                500008-86-6
     500008-81-1
                    500008-82-2
                                   500008-84-4
                                                 500008-85-5
     500008-87-7
                    500008-88-8
                                   500008-89-9
                                                 500008-90-2
                                                                500008-91-3
                                                 500008-95-7
                                                                500008-98-0
                                   500008-94-6
                    500008-93-5
     500008-92-4
                                                 500009-03-0
                                                                500009-04-1
     500008-99-1
                    500009-00-7
                                   500009-01-8
                                                                500009-09-6
                                   500009-07-4
     500009-05-2
                    500009-06-3
                                                 500009-08-5
     500009-10-9
                    500009-11-0
                                   500009-12-1
                                                 500009-14-3
                                                                500009-16-5
                                                 500009-23-4
                                                                500009-25-6
     500009-18-7
                    500009-20-1
                                   500009-21-2
```

```
500009-26-7
              500009-27-8
                             500009-28-9
                                            500009-29-0
                                                          500009-30-3
500009-31-4
              500009-32-5
                             500009-33-6
                                            500009-34-7
                                                          500009-35-8
500009-36-9
              500009-37-0
                             500009-38-1
                                            500009-39-2
                                                          500009-40-5
                                                          500009-45-0
500009-41-6
              500009-42-7
                             500009-43-8
                                            500009-44-9
500009-46-1
              500009-47-2
                             500009-49-4
                                            500009-50-7
                                                          500009-51-8
500009-52-9
              500009-53-0
                             500009-54-1
                                            500009-55-2
                                                          500009-56-3
500009-57-4
              500009-58-5
                             500009-59-6
                                            500009-60-9
                                                          500009-61-0
              500009-65-4
                             500009-66-5
                                            500009-67-6
                                                          500009-68-7
500009-62-1
500009-69-8
              500009-77-8
                             500009-78-9
                                            500009-79-0
                                                          500009-82-5
500009-83-6
                                            500009-87-0
                                                          500009-88-1
              500009-84-7
                             500009-86-9
500009-89-2
              500009-90-5
                             500009-91-6
                                            500009-92-7
                                                          500009-93-8
500009-94-9
              500009-95-0
                             500009-96-1
                                            500009-97-2
                                                          500009-98-3
                                            500010-02-6
                                                          500010-03-7
500009-99-4
              500010-00-4
                             500010-01-5
500010-04-8
              500010-05-9
                             500010-06-0
                                            500010-07-1
                                                          500010-08-2
500010-09-3
              500010-11-7
                             500010-12-8
                                            500010-13-9
                                                          500010-14-0
                                           500010-18-4
                                                          500010-19-5
500010-15-1
              500010-16-2
                             500010-17-3
500010-20-8
              500010-21-9
                             500010-22-0
                                            500010-23-1
                                                          500010-25-3
500010-26-4
              500010-27-5
                             500010-28-6
                                            500010-29-7
                                                          500010-30-0
              500010-32-2
                             500010-33-3
                                            500010-34-4
                                                          500010-35-5
500010-31-1
500010-36-6
              500010-37-7
                             500010-38-8
                                            500010-39-9
                                                          500010-40-2
500010-41-3
              500010-42-4
                             500010-43-5
                                            500010-44-6
                                                          500010-45-7
                                            500010-49-1
                                                          500010-50-4
500010-46-8
              500010-47-9
                             500010-48-0
500010-51-5
              500010-52-6
                             500010-53-7
                                            500010-54-8
                                                          500010-55-9
500010-56-0
              500010-57-1
                             500010-58-2
                                            500010-59-3
                                                          500010-60-6
                                            500010-64-0
500010-61-7
              500010-62-8
                             500010-63-9
                                                          500010-65-1
                                            500010-70-8
                                                          500010-71-9
500010-67-3
              500010-68-4
                             500010-69-5
500010-72-0
              500010-73-1
                             500010-74-2
                                            500010-75-3
                                                          500010-76-4
500010-77-5
              500010-79-7
                             500010-80-0
                                            500010-81-1
                                                          500010-82-2
500010-83-3
              500010-84-4
                             500010-85-5
                                            500010-86-6
                                                          500010-87-7
500010-88-8
              500010-89-9
                             500010-90-2
                                            500010-91-3
                                                          500010-92-4
500010-93-5
              500010-94-6
                             500010-95-7
                                            500010-96-8
                                                          500010-97-9
              500010-99-1
500010-98-0
                             500011-00-7
                                            500011-01-8
                                                          500011-02-9
500011-04-1
              500011-05-2
                             500011-06-3
                                            500011-07-4
                                                          500011-08-5
500011-10-9
              500011-11-0
                             500011-12-1
                                            500011-13-2
                                                          500011-14-3
                             500011-17-6
                                            500011-18-7
                                                          500011-19-8
500011-15-4
              500011-16-5
              500011-21-2
                             500011-22-3
                                           500011-23-4
500011-20-1
                                                          500011-24-5
500011-25-6
RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
(Biological study); USES (Uses)
   (anthranilamide compds. as pesticides for plant propagation material)
500011-26-7
                                                          500011-31-4
              500011-27-8
                             500011-28-9
                                           500011-29-0
500011-37-0
              500011-38-1
                             500011-39-2
                                            500011-40-5
                                                          500011-41-6
              500011-43-8
                             500011-44-9
                                            500011-45-0
                                                          500011-46-1
500011-42-7
500011-47-2
              500011-48-3
                             500011-49-4
                                            500011-50-7
                                                          500011-51-8
500011-52-9
              500011-53-0
                             500011-54-1
                                            500011-55-2
                                                          500011-56-3
500011-57-4
              500011-58-5
                             500011-59-6
                                            500011-60-9
                                                          500011-61-0
                                                          503163-52-8
              500011-63-2
                             500011-64-3
                                           500011-80-3
500011-62-1
503163-54-0
              503163-56-2
                             503163-66-4
RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
(Biological study); USES (Uses)
   (anthranilamide compds. as pesticides for plant propagation material)
362639-39-2
              362639-72-3
                             500005-60-7
                                           500005-61-8
                                                          500005-62-9
500005-63-0
              500005-66-3
                             500005-67-4
                                            500005-68-5
                                                          500005-83-4
                                            500005-96-9
500005-91-4
              500005-92-5
                             500005-93-6
                                                          500006-28-0
500007-18-1
              500007-19-2
                             500007-22-7
                                           500007-98-7
                                                          500007-99-8
                                           500009-24-5
              500009-19-8
                             500009-22-3
                                                          500009-70-1
500008-13-9
500009-71-2
              500009-72-3
                             500009-73-4
                                            500009-74-5
                                                          500009-75-6
                             500010-66-2
                                                          500011-09-6
500009-76-7
              500009-85-8
                                            500011-03-0
500011-30-3
              500011-32-5
                             500011-33-6
                                            500011-35-8
                                                          500011-36-9
500011-65-4
              500011-66-5
                             500011-67-6
                                            500011-68-7
                                                          500011-69-8
                                           500011-73-4
                                                          500011-74-5
500011-70-1
              500011-71-2
                             500011-72-3
500011-75-6
              500011-76-7
                             500011-77-8
                                           500011-78-9
                                                          500011-79-0
503163-58-4
              503163-61-9
                             503163-64-2
RL: AGR (Agricultural use); BSU (Biological study, unclassified); PRP
(Properties); BIOL (Biological study); USES (Uses)
   (anthranilamide compds. as pesticides for plant propagation material)
```

TΤ

IT

```
57-13-6D, Urea, derivs. 60-51-5, Dimethoate
IT
      52-68-6 56-38-2
      72-43-5 76-87-9, Fentin hydroxide 83-79-4 86-50-0, Azinphos-methyl
      99-30-9, Dicloran 108-62-3 115-29-7 115-32-2 116-06-3
     133-06-2, Captan 133-07-3, Folpet 137-26-8, Thiram 148-79-8, Thiabendazole 298-00-0 298-02-2 333-41-5, Diazinon 510-15-6 732-11-6 900-95-8, Fentin acetate 944-22-9 950-37-8 1332-40-7,
      Copper oxychloride 1563-66-2, Carbofuran 1897-45-6, Chlorothalonil
      2079-00-7, Blasticidin-S 2227-17-0 2310-17-0 2312-35-8 2425-06-1,
      Captafol 2439-01-2 2439-10-3, Dodine 2675-77-6, Chloroneb
      2921-88-2, Chlorpyrifos 5598-13-0, Chlorpyrifos-methyl 6585-53-1,
      Ferric methanearsonate 6923-22-4 6980-18-3, Kasugamycin 7440-50-8D,
      Copper, salts 7704-34-9, Sulfur, biological studies 8011-63-0,
      Bordeaux mixture 8018-01-7, Mancozeb 10265-92-6 10605-21-7,
      Carbendazim 11141-17-6, Azadirachtin 12427-38-2, Maneb
      13071-79-9 13121-70-5 13171-21-6 13356-08-6 16752-77-5
     17109-49-8, Edifenphos 17804-35-2, Benomyl 22224-92-6 22248-79-9 23103-98-2 23135-22-0 23564-05-8, Thiophanate-methyl 24579-73-5, Propamocarb 25311-71-1 26087-47-8, Iprobenfos 27605-76-1,
      Probenazole 30560-19-1, Acephate 33089-61-1 35367-38-5,
      Diflubenzuron 35400-43-2 36734-19-7, Iprodione 39148-24-8,
      Fosetylaluminum 39515-41-8 40596-69-8 41198-08-7
     41814-78-2, Tricyclazole 43121-43-3, Triadimefon 50471-44-8, Vinclozolin 50512-35-1, Isoprothiolane 50642-14-3, Validamycin
                      52207-48-4 52315-07-8, Cypermethrin
      51630-58-1
      52645-53-1 52918-63-5, Deltamethrin 53112-28-0,
      Pyrimethanil 55219-65-3, Triadimenol 55814-41-0, Mepronil
     57369-32-1, Pyroquilon 57646-30-7, Furalaxyl 57837-19-1, Metalaxyl 57966-95-7, Cymoxanil 58842-20-9 59669-26-0 60168-88-9, Fenarimol
     60207-90-1, Propiconazole 62850-32-2 62865-36-5, Diclomezine 63837-33-2, Diofenolan 64628-44-0 66063-05-6, Pencycuron 66215-27-8,
      Cyromazine 66230-04-4 66246-88-6, Penconazole 66332-96-5,
      Flutolanil 66841-25-6 67306-00-7, Fenpropidin 67564-91-4,
      Fenpropimorph 67747-09-5, Prochloraz 68085-85-8, Cyhalothrin
      68359-37-5, Cyfluthrin 69327-76-0, Buprofezin 70124-77-5
70630-17-0, Mefenoxam 71422-67-8, Chlorfluazuron 71751-41-2, Abamectin
      72490-01-8 73989-17-0, Avermectin 74738-17-3, Fenpiclonil
      76674-21-0, Flutriafol 77732-09-3, Oxadixyl 78587-05-0 79538-32-2
      79622-59-6, Fluazinam 79983-71-4, Hexaconazole 80060-09-9, Diafenthiuron 82657-04-3, Bifenthrin 83121-18-0 83657-18-5
      Diniconazole-M 83657-24-3, Diniconazole 84466-05-7, Amidoflumet
      85509-19-9, Flusilazole 86479-06-3 88283-41-4, Pyrifenox 88671-89-0,
      Myclobutanil 91465-08-6 94361-06-5, Cyproconazole 95737-68-1
      96489-71-3 101463-69-8 102851-06-9 103055-07-8 104030-54-8,
     Carpropamid 107534-96-3, Tebuconazole 110488-70-5, Dimethomorph 111988-49-9 112226-61-6 112281-77-3, Tetraconazole 112410-23-8 114369-43-6, Fenbuconazole 116255-48-2, Bromuconazole 116714-46-6 118134-30-8, Spiroxamine 119168-77-3 119446-68-3, Difenoconazole
      119791-41-2, Emamectin 120068-37-3 120928-09-8 121451-02-3
      121552-61-2, Cyprodinil 122453-73-0, Chlorfenapyr 123312-89-0
123572-88-3, Furametpyr 124495-18-7, Quinoxyfen 125116-23-6,
Metconazole 125225-28-7, Ipconazole 126448-41-7, Acibenzolar
130000-40-7, Thifluzamide 131341-86-1, Fludioxonil 131807-57-3,
      Famoxadone 131860-33-8, Azoxystrobin 131983-72-7, Triticonazole
      133408-50-1, Metominostrobin 133855-98-8, Epoxiconazole 134098-61-6
      135410-20-7, Acetamiprid 136426-54-5, Fluquinconazole 138261-41-3
      139920-32-4, Diclocymet 140923-17-7, SZX0722 141517-21-7,
      Trifloxystrobin 143390-89-0, Kresoxim-methyl 143807-66-3, Chromafenozide 149877-41-8, Bifenazate 149961-52-4, Dimoxystrobin
      153233-91-1 153719-23-4 154025-04-4, Flumetover 156052-68-5, RH 7281
      158062-67-0 161050-58-4 161326-34-7 168316-95-8, Spinosad
170015-32-4 173584-44-6 175013-18-0, Pyraclostrobin 178928-70-6,
Prothioconazole 179101-81-6 180409-60-3, Cyflufenamid 181587-01-9
      188425-85-6, Nicobifen 189278-12-4, Proquinazid
                                                                        210880-92-5,
      Clothianidin 211867-47-9, SYP-L190 220899-03-6,
      Metrafenone 223580-51-6, Tiadinil 248593-16-0, Orysastrobin
      283594-90-1 361377-29-9, Fluoxastrobin
```

```
RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
     75-35-4D, Vinylidene chloride, polymers and copolymers
                                                              79-41-4D.
TT
     Methylacrylic acid, imide derivs. 79-41-4D, Acrylimide, polymers and
     copolymers, imide derivs.
                                8062-15-5, Lignosulfonate
                                                            9000-01-5, Gum
                                                            9000-65-1,
              9000-30-0, Guar gum 9000-36-6, Karaya gum
     Tragacanth gum 9002-89-5 9002-89-5D, Polyvinyl alcohol, copolymers
     9003-09-2, Polyvinyl methyl ether 9003-20-7D, Polyvinyl acetate,
     derivs., copolymers 9003-39-8, Polyvinylpyrrolidone 9004-32-4,
     Carboxymethylcellulose 9004-34-6D, Cellulose, derivs.
                                                             9004-53-9,
               9004-57-3, Ethylcellulose 9004-64-2, Hydroxypropylcellulose
     9004-67-5D, Methylcellulose, derivs.
                                           9005-25-8D, Starch, derivs.
     9005-32-7, Alginic acid 9010-98-4, Polychloroprene
                                                            9011-16-9
     9012-76-4, Chitosan 9050-36-6, Malto-dextrin 25086-89-9
                                                                   25322-68-3,
     Polyethylene oxide 26022-14-0, Polyhydroxyethyl acrylate 308
Polyvinylacrylate 37353-59-6D, Hydroxymethylcellulose, derivs.
                                                                  30811-69-9,
     69670-80-0, Hydroxymethylpropylcellulose
     RL: AGR (Agricultural use); TEM (Technical or engineered material use);
     BIOL (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
                  362637-70-5P 362638-30-0P
IT
     362637-53-4P
                                                 362639-62-1P
                                                                 438450-41-0P.
     N-[4-Chloro-2-methyl-6-[(methylamino)carbonyl]phenyl]-1-(3-chloro-2-
     pyridiny1)-3-(trifluoromethy1)-1H-pyrazole-5-carboxamide 500008-00-4P
                                                 500008-62-8P
                                                                 500010-10-6P
     500008-44-6P
                  500008-45-7P 500008-60-6P
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
     (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of anthranilamide compds. as pesticides for plant propagation
        material)
IT
     129585-50-8P
     RL: BYP (Byproduct); SPN (Synthetic preparation); PREP (Preparation)
        (preparation of anthranilamide compds. as pesticides for plant propagation
        material)
IT
     74-89-5, Methylamine, reactions 75-03-6, Iodoethane
                                                             75-31-0,
     Isopropylamine, reactions 76-05-1, Trifluoroacetic acid, reactions
     79-37-8, Oxalyl chloride 98-59-9, p-Toluenesulfonyl chloride 100-63-0,
     Phenylhydrazine 109-72-8, n-Butyllithium, reactions 112-02-7, Cetyltrimethylammonium chloride 121-44-8, Triethylamine, reactions
     124-63-0, Methanesulfonyl chloride 128-09-6, N-Chlorosuccinimide
               421-50-1, 1,1,1-Trifluoroacetone 503-38-8, Trichloromethyl
     367-57-7
                   541-41-3, Ethyl chloroformate 584-08-7, Potassium
     chloroformate
     carbonate 630-25-1, 1,2-Dibromotetrachloroethane 1310-58-3, Potassium
                           2402-77-9, 2,3-Dichloropyridine 4111-54-0,
     hydroxide, reactions
     Lithium diisopropylamide 4389-45-1, 2-Amino-3-methylbenzoic acid
     4755-77-5, Ethyl chlorooxoacetate 5437-38-7, 3-Methyl-2-nitrobenzoic
          6226-25-1, 2,2,2-Trifluoroethyl trifluoromethanesulfonate
     7087-68-5, N,N-Diisopropylethylamine 7664-93-9, Sulfuric acid, reactions
     7789-69-7, Phosphorus pentabromide 10025-87-3, Phosphorus oxychloride
     10035-10-6, Hydrogen bromide, reactions 14521-80-3, 3-Bromopyrazole
     20154-03-4, 3-Trifluoromethylpyrazole 22206-57-1, Tetrabutylammonium
     fluoride hydrate 22841-92-5 65753-47-1, 2-Chloro-3-
     trifluoromethylpyridine 66176-17-8, 3-Methylisatoic anhydride
                   458543-79-8 499790-43-1
                                              500011-81-4 500011-88-1
     133228-21-4
     500011-94-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of anthranilamide compds. as pesticides for plant propagation
        material)
     14339-33-4P, 3-Chloropyrazole 20776-67-4P, 2-Amino-3-methyl-5-
TT
                        68289-10-1P, 2-Amino-3-methyl-N-(1-
     chlorobenzoic acid
     methylethyl)benzamide 120374-68-7P 128694-66-6P 362640-53-7P,
     3-Methyl-N-(1-methylethyl)-2-nitrobenzamide 362640-58-2P
                                                                  362640-59-3P
     362640-60-6P 362640-61-7P 362640-62-8P 438450-38-5P,
     3-Chloro-2-[3-(trifluoromethyl)-1H-pyrazol-1-yl]pyridine 438450-39-6P
```

```
438450-40-9P, 6-Chloro-2-[1-(3-chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-
     pyrazol-5-yl]-8-methyl-4H-3,1-benzoxazin-4-one
                                                     458543-77-6P
                                                   500011-82-5P
     458543-78-7P
                    499790-45-3P
                                   499790-46-4P
                                                                  500011-83-6P
                                                                  500011-89-2P
     500011-84-7P
                    500011-85-8P
                                   500011-86-9P
                                                   500011-87-0P
                    500011-91-6P
     500011-90-5P
                                   500011-92-7P
                                                   500011-95-0P
                                                                  500011-96-1P
                    500011-98-3P
     500011-97-2P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of anthranilamide compds. as pesticides for plant propagation
        material)
RE.CNT
              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Du Pont; WO 0170671 A 2001 HCAPLUS
(2) Mitsubishi Chem Ind; EP 0289879 A 1988 HCAPLUS
     11141-17-6, Azadirachtin 39515-41-8 51630-58-1
     52315-07-8, Cypermethrin 52645-53-1 52918-63-5
     , Deltamethrin 66230-04-4 68085-85-8, Cyhalothrin
     68359-37-5, Cyfluthrin 82657-04-3, Bifenthrin
     91465-08-6 120068-37-3 220899-03-6,
     Metrafenone
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL
     (Biological study); USES (Uses)
        (in pesticidal compns. for plant propagation material containing
        anthranilamides)
     11141-17-6 HCAPLUS
RN
     1H, 7H-Naphtho [1,8-bc:4,4a-c'] difuran-5,10a(8H)-dicarboxylic acid,
CN
     10-(acetyloxy)octahydro-3,5-dihydroxy-4-methyl-8-[[(2E)-2-methyl-1-oxo-2-
     butenyl]oxy]-4-[(1aR,2S,3aS,6aS,7S,7aS)-3a,6a,7,7a-tetrahydro-6a-hydroxy-
     7a-methyl-2,7-methanofuro[2,3-b]oxireno[e]oxepin-1a(2H)-yl]-, dimethyl
     ester, (2aR,3S,4S,4aR,5S,7aS,8S,10R,10aS,10bR)- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

Double bond geometry as shown.

RN 39515-41-8 HCAPLUS
CN Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 51630-58-1 HCAPLUS

CN Benzeneacetic acid, 4-chloro- α -(1-methylethyl)-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 52315-07-8 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 52645-53-1 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 52918-63-5 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, (S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 66230-04-4 HCAPLUS

CN Benzeneacetic acid, 4-chloro- α -(1-methylethyl)-, (S)-cyano(3-phenoxyphenyl)methyl ester, (α S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 68085-85-8 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 68359-37-5 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(4-fluoro-3-phenoxyphenyl)methyl ester (9CI) (CA INDEX NAME)

RN 82657-04-3 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (1R,3R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

Double bond geometry as shown.

$$\begin{array}{c|c} C1 & Me & Me \\ \hline Z & R & \\ \hline & & \\ & &$$

RN 91465-08-6 HCAPLUS

CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1S,3S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.

RN 120068-37-3 HCAPLUS

CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-(9CI) (CA INDEX NAME)

RN 220899-03-6 HCAPLUS

CN Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6methylphenyl)- (9CI) (CA INDEX NAME)

L50 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:797993 HCAPLUS

DN 135:314876

ED Entered STN: 02 Nov 2001

TI Synergistic fungicidal compositions containing benzophenone derivatives and azoxystrobin

IN Leadbitter, Neil

PA Syngenta Participations A.-G., Switz.

SO PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A01N043-54

ICS A01N043-54; A01N037-02; A01N035-04

CC 5-2 (Agrochemical Bioregulators)

FAN.CNT 1

FAN.	PATENT NO.				KIND DATE			APPLICATION NO.					DATE					
		- 					-									-		
PI	WO	2001	0806	43		A1		2001	1101	1	WO 2	001-1	EP46	24		2	0010	424
		W :	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			-	-		-		DK,										
			HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,
								MG,										

```
RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                             EP 2001-940360
                                                                     20010424
     EP 1278414
                                 20030129
                          Α1
     EP 1278414
                          B1
                                 20031217
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     BR 2001010242
                          Α
                                 20030701
                                             BR 2001-10242
                                                                     20010424
                                             JP 2001-577752
                                                                     20010424
     JP 2003531155
                          T2
                                 20031021
     AT 256393
                          E
                                 20040115
                                             AT 2001-940360
                                                                     20010424
                                                                     20010424
     ES 2213117
                          T3
                                 20040816
                                             ES 2001-1940360
                                             US 2003-258513
                                                                     20030311
     US 2003166669
                          Α1
                                 20030904
     US 6790851
                          B2
                                 20040914
                                 20000426
PRAI GB 2000-10198
                          Α
     WO 2001-EP4624
                          W
                                 20010424
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                         ----
WO 2001080643
                 ICM
                        A01N043-54
                 ICS
                        A01N043-54; A01N037-02; A01N035-04
                 ECLA
WO 2001080643
                        A01N043/54+M
US 2003166669
                 NCL
                        514/269.000
                 ECLA
                        A01N043/54+M
     MARPAT 135:314876
OS
GΙ
```

```
ΔR
     Synergistic fungicidal compns. for combating phytopathogenic diseases on
     crop plants comprise (a) a benzophenone of I (R1 = methoxy, Me, hydroxy,
     acetoxy, or pivaloyloxy; R2 = C1-C4 alkoxy or 2-halogenbenzyloxy; R3 =
     C1-C4 alkoxy; R4 = C1-C4 alkyl, halo, or trifluoromethyl; R5 = H, halo,
     C1-C4 alkoxy, trifluoromethyl, or nitro) in association with (b) azoxystrobin.
ST
     benzophenone deriv azoxystrobin mixt synergistic fungicide
IT
     Fungicides
        (synergistic; synergistic fungicidal compns. containing benzophenone
        derivs. and azoxystrobin)
     131860-33-8D, Azoxystrobin, mixts. with benzophenone derivs.
IT
                                  368872-62-2
                                                 368872-63-3
     368872-60-0
                    368872-61-1
                                  368872-66-6
                                                 368872-67-7
                    368872-65-5
                                                                368872-68-8
     368872-64-4
     368872-69-9 368872-70-2 368872-71-3
     368872-72-4
     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
        (synergistic fungicidal compns. containing)
RE.CNT
              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) American Cyanamid Co; EP 0897904 A 1999 HCAPLUS(2) American Cyanamid Co; EP 0899255 A 1999 HCAPLUS
(3) American Cyanamid Co; EP 0933025 A 1999 HCAPLUS
(4) American Cyanamid Co; EP 1023834 A 2000 HCAPLUS
(5) Novartis Erfind Verwalt Gmbh; WO 0076317 A 2000 HCAPLUS
IT
     368872-60-0 368872-70-2 368872-71-3
     368872-72-4
```

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)

(synergistic fungicidal compns. containing)

RN 368872-60-0 HCAPLUS CN Benzeneacetic acid, 2-[[6-(2-cyanophenoxy)-4-pyrimidinyl]oxy]- α -(methoxymethylene)-, methyl ester, (α E)-, mixt. with (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6-methylphenyl)methanone (9CI) (CA INDEX NAME)

CM 1

CRN 220899-03-6 CMF C19 H21 Br O5

CM 2

CRN 131860-33-8 CMF C22 H17 N3 O5

Double bond geometry as shown.

RN 368872-70-2 HCAPLUS

Benzeneacetic acid, 2-[[6-(2-cyanophenoxy)-4-pyrimidinyl]oxy]-α-(methoxymethylene)-, methyl ester, (αΕ)-, mixt. with (3-bromo-6-hydroxy-2-methylphenyl)(2,3,4-trimethoxy-6-methylphenyl)methanone (9CI) (CA INDEX NAME)

CM 1

CN

CRN 252955-10-5 CMF C18 H19 Br O5

CM 2

CRN 131860-33-8 CMF C22 H17 N3 O5

Double bond geometry as shown.

RN 368872-71-3 HCAPLUS

CN Benzeneacetic acid, $2-[[6-(2-\text{cyanophenoxy})-4-\text{pyrimidiny}]] - \alpha-(\text{methoxymethylene})-, methyl ester, <math>(\alpha E)$ -, mixt. with [6-(acetyloxy)-3-bromo-2-methylpheny] (2,3,4-trimethoxy-6-methylphenyl) methanone (9CI) (CA INDEX NAME)

CM 1

CRN 252955-09-2 CMF C20 H21 Br O6

CM 2

CRN 131860-33-8 CMF C22 H17 N3 O5

Double bond geometry as shown.

RN 368872-72-4 HCAPLUS

CN Benzeneacetic acid, 2-[[6-(2-cyanophenoxy)-4-pyrimidinyl]oxy]-α(methoxymethylene)-, methyl ester, (αE)-, mixt. with
(3-chloro-6-hydroxy-2-methylphenyl)(2,3,4-trimethoxy-6methylphenyl)methanone (9CI) (CA INDEX NAME)

CM 1

CRN 252955-12-7 CMF C18 H19 Cl O5

CM 2

CRN 131860-33-8 CMF C22 H17 N3 O5

Double bond geometry as shown.

```
L50 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
     2001:797992 HCAPLUS
AN
DN
     135:328375
ED
     Entered STN: 02 Nov 2001
     Synergistic fungicidal mixtures of (E,E)-\alpha-(Methoxyimino)-2-[[[[1-(3-mixtures)]]]
TI
     trifluoromethylphenyl)ethylidene]amino]oxy]methyl]benzenacetic acid Me
     ester with benzophenones
IN
     Leadbitter, Neil
     Bayer Aktiengesellschaft, Germany
PΑ
     PCT Int. Appl., 18 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
IC
     ICM A01N037-50
          A01N037-50; A01N037-02; A01N035-04
CC
     5-2 (Agrochemical Bioregulators)
FAN.CNT 1
                                                                       DATE
     PATENT NO.
                          KIND
                                 DATE
                                              APPLICATION NO.
                                              ------
                          ----
                                  _____
                                 20011101
                                              WO 2001-EP4228
                                                                       20010412
ΡI
     WO 2001080640
                           A1
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
```

```
PRAI GB 2000-10200
                          Α
                                20000426
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
 WO 2001080640
                 ICM
                        A01N037-50
                        A01N037-50; A01N037-02; A01N035-04
                 ICS
WO 2001080640
                 ECLA
                        A01N037/50+M
os
     MARPAT 135:328375
GΙ
```

AB Mixts. of $(E,E)-\alpha$ - (Methoxyimino) -2-[[[[1-(3trifluoromethylphenyl)ethylidene]amino]oxy]methyl]benzenacetic acid Me ester with benzophenones I (R1 = Cl, Me; R2 = H, Br, Cl, CF3; R3 = H, acetyl, pivaloyl) are used as synergistic fungicides for treatment of phytopathogenic diseases of crop plants. ST benzenacetate deriv benzophenone mixt synergistic fungicide IT Fungicides (synergistic; synergistic fungicidal mixts. of $\{(E,E)-\alpha-\}$ (Methoxyimino) -2-[[[[1-(phenyl)ethylidene]amino]oxy]methyl]benzenacetic } acid' Me ester with benzophenones) TT 141517-21-7D, mixts. with benzophenones 369374-47-0 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (synergistic fungicidal composition containing) THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT RE (1) American Cyanamid Co; EP 0967196 A 1999 HCAPLUS (2) American Cyanamid Co; EP 1023834 A 2000 HCAPLUS (3) Ciba Geigy Ag; EP 0460575 A 1991 HCAPLUS (4) Novartis Erfind Verwalt Gmbh; WO 0072677 A 2000 HCAPLUS (5) Novartis Erfind Verwalt Gmbh; WO 0072678 A 2000 HCAPLUS ΙT 369374-47-0 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (synergistic fungicidal composition containing) RN · 369374-47-0 HCAPLUS Benzeneacetic acid, α -(methoxyimino)-2-[[[(E)-[1-[3-CN (trifluoromethyl)phenyl]ethylidene]amino]oxy]methyl]-, methyl ester, (αE)-, mixt. with (3-bromo-6-hydroxy-2-methylphenyl) (2,3,4trimethoxy-6-methylphenyl)methanone (9CI) (CA INDEX NAME) CM CRN 252955-10-5

CMF C18 H19 Br O5

CM

AN

CRN 141517-21-7 CMF C20 H19 F3 N2 O4

Double bond geometry as shown.

L50 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

```
2000:900389 HCAPLUS
DN
     134:38252
ED
     Entered STN: 22 Dec 2000
     Synergistic fungicidal combinations of benzophenones with strobilurins,
TI
     cyanoimidazoles, and carbonic acid amides
IN
     Dalton, Ian Paul
     Novartis Ag, Switz.; Novartis-Erfindungen Verwaltungsgesellschaft M.B.H.
PA
SO
     PCT Int. Appl., 25 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
IC
     ICM A01N035-04
     ICS A01N035-04; A01N047-24; A01N047-12; A01N043-88; A01N043-653;
          A01N043-50; A01N043-40; A01N037-24; A01N037-20
CC
     5-2 (Agrochemical Bioregulators)
FAN.CNT 1
     PATENT NO.
                           KIND
                                  DATE
                                               APPLICATION NO.
                                                                        DATE
                                                ______
                           ----
                                  -----
ΡI
     WO 2000076317
                           A1
                                  20001221
                                               WO 2000-EP5433
                                                                         20000613
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
              CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
              ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
              LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
         SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
              CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                               EP 2000-951283
                                                                         20000613
                                  20020313
     EP 1185173
                            Α1
     EP 1185173
                            B1
                                  20030528
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
                                   20020423
                                               BR 2000-11615
                                                                         20000613
     BR 2000011615
```

JР	200350144	8	T2	20030114	JР	2001-502673	20000613
AT	241268		E	20030615	AT	2000-951283	20000613
PT	1185173		T	20031031	PT	2000-951283	20000613
ES	2200905		T 3	20040316	ES	2000-951283	20000613
US	200210724	6	A1	20020808	US	2001-997607	20011129
US	6689776		B2	20040210			
PRAI GB	1999-1378	7	Α	19990614			
GB	1999-1378	9	A	19990614			
GB	1999-1379	2	A	19990614			
GB	1999-1379	4	A	19990614			
GB	1999-1379	6	A	19990614			
GB	1999-1379	8	A	19990614			
GB	1999-1380	3	A	19990614			
GB	1999-1380	5	A	19990614			
GB	1999-1380	7	A	19990614			
GB	1999-1380	8	A	19990614			
GB	1999-1381	.0	Α	19990614			
GB	GB 1999-13812			19990614			
GB	GB 1999-13813			19990614			
GB	GB 1999-13814			19990614			
GB 1999-13816			A	19990614			
GB 1999-13817			Α	19990614			
GB 1999-13818		8	Α	19990614			
GB	1999-1382	0	A	19990614			•
GB	GB 1999-13822		A	19990614			
	1999-1382	_	A	19990614			
	GB 1999-13826		A	19990614	-		
	GB 1999-13827		A	19990614			
	2000-EP54	33	M	20000613			
CLASS							•
PATENT	NO.	CLASS I	PATENT	FAMILY CLAS	SIFIC	CATION CODES	
WO 2000			101N035		7 04	20121047 10	7013042 00
				•			; A01N043-88;
				•	43-50); AUINU43-4	0; A01N037-24;
WO 0000	076317	_	A01N037				
WO 2000			101N035	•			•
US 2002			514/229 A01N035				
GI		ECLA A	70 TMO3 2)/ U4+M			
GI							

$$\mathbb{R}^1$$
 Me OMe \mathbb{R}^5 \mathbb{R}^4 \mathbb{R}^3 \mathbb{R}^2 \mathbb{R}^2 \mathbb{R}^4

- AB The invention relates to a method of combating phytopathogenic diseases on crop plants which comprises applying to the crop plants or the locus thereof being infested with said phytopathogenic disease an effective amount of a combination of a benzophenone I (R1 = methoxy, Me; R2 = C1-C4alkoxy, 2-halogenbenzyloxy; R3 = C1-C4alkoxy; R4 = C1-C4alkyl, halo, or trifluoromethyl; R5 = H, halo, C1-C4alkoxy, trifluoromethyl, or nitro) in association with a compound selected from strobilurins, cyanoimidazoles, and carbonic acid amides.
- ST fungicide synergistic benzophenone strobilurin cyanoimidazole carbonic acid amide
- IT Fungicides

(synergistic; combinations of benzophenones with strobilurins,

cyanoimidazoles, and carbonic acid amides) 120116-88-3D, IKF IT117428-22-5D, Picoxystrobin, mixts. with benzophenones 916, mixts. with benzophenones 126833-17-8D, Fenhexamid, mixts. with benzophenones 140923-17-7D, Iprovalicarb, mixts. with benzophenones 156052-68-5D, RH 7281, mixts. with benzophenones 161326-34-7D, Fenamidone, mixts. with benzophenones 175013-18-0D, mixts. with 185336-79-2D, mixts. with benzophenones 185949-88-6D, benzophenones mixts. with benzophenones 193740-76-0D, mixts. with benzophenones 220898-62-4D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid 220898-85-1D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220899-03-6D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220899-11-6D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220899-25-2D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-12-9D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-62-9D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-68-5D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-85-6D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid 220900-88-9D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 221051-13-4D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 221051-14-5D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 221051-15-6D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 221051-16-7D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid 221051-17-8D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 221051-55-4D, mixts. with strobilurins, 221051-56-5D, mixts. with cyanoimidazoles, and carbonic acid amides strobilurins, cyanoimidazoles, and carbonic acid amides 221051-57-6D. mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 221051-58-7D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid .221051-59-8D, mixts. with strobilurins, cyanoimidazoles, and 221051-60-1D, mixts. with strobilurins, carbonic acid amides cyanoimidazoles, and carbonic acid amides 221051-61-2D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides mixts. with benzophenones

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (in synergistic fungicidal combinations)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

(1) American Cyanamid Co; EP 0897904 A 1999 HCAPLUS

(2) American Cyanamid Co; EP 0899255 A 1999 HCAPLUS

IT 220899-03-6D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-12-9D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-62-9D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-68-5D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides acid amides

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (in synergistic fungicidal combinations)

RN 220899-03-6 HCAPLUS

CN Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6methylphenyl)- (9CI) (CA INDEX NAME)

RN 220900-12-9 HCAPLUS

CN Methanone, (3-chloro-6-methoxy-2-methylphenyl) (2,3,4-trimethoxy-6methylphenyl) - (9CI) (CA INDEX NAME)

RN 220900-62-9 HCAPLUS

CN Methanone, (3-chloro-6-methoxy-2-methylphenyl) (3-ethoxy-2,4-dimethoxy-6-methylphenyl) - (9CI) (CA INDEX NAME)

RN 220900-68-5 HCAPLUS

CN Methanone, (3-chloro-6-methoxy-2-methylphenyl) (2,4-dimethoxy-6-methyl-3-propoxyphenyl) - (9CI) (CA INDEX NAME)

L50 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:861422 HCAPLUS

DN 134:14301

ED Entered STN: 08 Dec 2000

TI Synergistic fungicidal compositions

IN Leadbitter, Neil

PA Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.

SO PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A01N037-50

ICS A01N037-50; A01N035-04

CC 5-2 (Agrochemical Bioregulators)

FAN.CNT 1

PATENT NO. KIND APPLICATION NO. DATE _____ ----_____ ------ΡI WO 2000072677 20001207 WO 2000-EP4741 20000524 A1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,

```
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
              SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
              ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                                         20000524
                                               EP 2000-943734
     EP 1189508
                            A1
                                  20020327
     EP 1189508
                            Bl
                                  20031008
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
     ES 2208355
                            Т3
                                  20040616
                                               ES 2000-943734
                                                                         20000524
                                                                         20011029
     ZA 2001008893
                            Α
                                  20020823
                                                ZA 2001-8893
     US 6472428
                            B1
                                  20021029
                                               US 2002-979330
                                                                         20020212
                                  19990526
PRAI GB 1999-12219
                            Α
     WO 2000-EP4741
                            W
                                  20000524
CLASS
                  CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                         _____
 _____
                  ____
 WO 2000072677
                         A01N037-50
                  TCM
                         A01N037-50; A01N035-04
                  ICS
                         A01N037/50+M
 WO 2000072677
                  ECLA
                  NCL
                          514/539.000; 514/687.000
 US 6472428
                  ECLA
                         A01N037/50+M
     MARPAT 134:14301
os
GΙ
```

OMe Me OMe
$$R^1$$
 R^2 R^3 R^3 R^4 R^4

The invention relates to synergistic fungicidal combinations comprising $(E,E)-\alpha$ - (methoxyimino) -2-[[[[1-[3-(trifluoromethyl)phenyl]ethylidene]amino]oxy]methyl]benzeneacetic acid Me ester in association with a benzophenone I (R1 = H, halo, C1-5 alkyl or CF3; R2 = halo, C1-5 alkyl or CF3; R3 = C1-5 alkyl or optionally substituted benzyl; R4 = C1-5 alkyl) which are particularly effective in combating or preventing fungal diseases of crop plants.

ST synergism fungicide compn benzophenone deriv

IT Fungicides

(synergistic; compns. containing benzophenone derivative)

IT 309752-56-5 309752-57-6 309752-58-7

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (synergistic fungicidal composition)

IT 141517-21-7D, mixts. with benzophenone derivs.

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (synergistic fungicidal compns.)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) American Cyanamid Company; EP 0897904 A 1999 HCAPLUS

(2) Ciba-Geigy A-G Switz; EP 0460575 A 1991 HCAPLUS

IT 309752-56-5 309752-57-6 309752-58-7

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (synergistic fungicidal composition)

RN 309752-56-5 HCAPLUS

CM 1

CRN 220899-03-6 CMF C19 H21 Br O5

CM 2

CRN 141517-21-7 CMF C20 H19 F3 N2 O4

Double bond geometry as shown.

RN 309752-57-6 HCAPLUS

Benzeneacetic acid, α -(methoxyimino)-2-[[[(E)-[1-[3-(trifluoromethyl)phenyl]ethylidene]amino]oxy]methyl]-, methyl ester, (α E)-, mixt. with (3-chloro-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6-methylphenyl)methanone (9CI) (CA INDEX NAME)

CM 1

CN

CRN 220900-12-9 CMF C19 H21 Cl O5

CM 2

CRN 141517-21-7 CMF C20 H19 F3 N2 O4

Double bond geometry as shown.

RN 309752-58-7 HCAPLUS

CM 1

CRN 220900-68-5 CMF C21 H25 Cl O5

CM 2

CRN 141517-21-7 CMF C20 H19 F3 N2 O4

Double bond geometry as shown.

L50 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:553194 HCAPLUS

DN 133:146282

ED Entered STN: 11 Aug 2000

TI Stable non-aqueous fungicidal or herbicidal emulsifiable concentrate for crop protection containing defoaming agents

IN Aven, Michael; Schmidt, Friedrich

PA American Cyanamid Co., USA

SO Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

```
DT
    Patent
LA
    English
    ICM A01N025-02
IC
   5-3 (Agrochemical Bioregulators)
CC
FAN.CNT 1
                              DATE
                                        APPLICATION NO. DATE
    PATENT NO.
                       KIND
                              -----
     -----
                       ----
                                          ----
                       A1
                              20000809 EP 2000-300673 20000128
    EP 1025757
PΙ
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
PRAI US 1999-240418
                       Α
                              19990129
CLASS
               CLASS PATENT FAMILY CLASSIFICATION CODES
PATENT NO.
 _____
EP 1025757 ICM A01N025-02
              ECLA A01N025/02
EP 1025757
    Stable non-aqueous emulsifiable concentrate formulation for crop protection
    comprises at least one fungicide or herbicide, at least one non-polar organic
    solvent, optionally, at least one polar aprotic cosolvent, an emulsifying
    surfactant system enabling an oil-in-water emulsion to be formed when the
    formulation is added to water, and at least one defoaming or foam breaking
    agent selected from the group consisting of perfluoroalkylphosphonic
    acids, perfluoroalkylphosphinic acids and perfluoroaliph. polymeric
    esters.
    fungicide herbicide emulsion conc defoaming
ST
    Alcohols, uses
    RL: MOA (Modifier or additive use); USES (Uses)
       (C9-11, ethoxylated; non-ionic surfactant in stable fungicidal or
       herbicidal emulsifiable concentrate)
TТ
    Emulsions
    Emulsions
       (agrochem.; stable fungicidal or herbicidal emulsifiable concentrate containing
       defoaming agents)
IT
    Carboxylic acids, uses
    RL: MOA (Modifier or additive use); USES (Uses)
       (dicarboxylic, C4-6, di-Me esters; co-solvent in stable fungicidal or
       herbicidal emulsifiable concentrate)
TT
    Agrochemical formulations
    Agrochemical formulations
       (emulsions; stable fungicidal or herbicidal emulsifiable concentrate containing
       defoaming agents)
TT
    Canola oil
    RL: MOA (Modifier or additive use); USES (Uses)
       (ethoxylated, Eumulgin CO 3373; non-ionic surfactant in stable
       fungicidal or herbicidal emulsifiable concentrate)
IT
    Castor oil
    RL: MOA (Modifier or additive use); USES (Uses)
       (ethoxylated, Mergital EL 33, Ukanil 2507; co-solvent in stable
       fungicidal or herbicidal emulsifiable concentrate)
TT
    Solvent naphtha
       (solvent in stable fungicidal or herbicidal emulsifiable concentrate)
IT
    Aromatic hydrocarbons, uses
    Paraffin oils
    RL: MOA (Modifier or additive use); USES (Uses)
       (solvent in stable fungicidal or herbicidal emulsifiable concentrate)
IT
    Fungicides
       (stable fungicidal emulsifiable concentrate containing defoaming agents)
ΙT
    Pesticide formulations
       (stable fungicidal or herbicidal emulsifiable concentrate containing defoaming
       agents)
IT
    Antifoaming agents
      Herbicides
       (stable herbicidal emulsifiable concentrate containing defoaming agents)
IT
    617-51-6, Lactic acid isopropyl ester
    RL: MOA (Modifier or additive use); USES (Uses)
       (Purasolv IPL; solvent in stable fungicidal or herbicidal emulsifiable
```

Page 62

```
concentrate)
     9016-00-6, Rhodorsil 454
TТ
     RL: MOA (Modifier or additive use); USES (Uses)
        (Rhodorsil 454; antifoaming agent in stable fungicidal or herbicidal
        emulsifiable concentrate)
                                26264-06-2, Rhodacal 70b
TΤ
     1331-61-9, Rhodacal 2283
     RL: MOA (Modifier or additive use); USES (Uses)
        (anionic surfactant in stable fungicidal or herbicidal emulsifiable
        concentrate)
ΙT
                                11114-17-3, Fluorad FC-430
                                                              67906-42-7,
     2991-51-7, Fluorad FC-129
     Fluorad FC-120
                    68958-61-2, Fluorad FC-171 135506-92-2, Fluowet pp
     141615-38-5, Fluowet pl80 287716-37-4, Rhodorsil 467
     RL: MOA (Modifier or additive use); USES (Uses)
        (antifoaming agent in stable fungicidal or herbicidal emulsifiable
        concentrate)
IT
     96-48-0, γ-Butyrolactone
                                110-71-4, Ethylene glycol, dimethyl ether
     6837-24-7, N-Cyclohexylpyrrolidone
     RL: MOA (Modifier or additive use); USES (Uses)
        (co-solvent in stable fungicidal or herbicidal emulsifiable concentrate)
     110488-70-5, Dimethomorph 125116-23-6, Metconazole 220899-03-6
TT
     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
        (fungicide in stable emulsifiable concentrate)
     29450-45-1 40487-42-1, Pendimethalin 137641-05-5, Picolinafen
IT
     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
        (herbicide in stable emulsifiable concentrate)
IT
     2687-94-7 2687-96-9, Agsol Ex12
                                        32440-50-9, Agrimer al25
     140175-09-3, Atplus mba 11-7
                                   286940-99-6
     RL: MOA (Modifier or additive use); USES (Uses)
        (non-ionic surfactant in stable fungicidal or herbicidal emulsifiable
        concentrate)
     26264-05-1, Atlox 3300b
                              128002-46-0, Atlox 4855b
TT
    RL: MOA (Modifier or additive use); USES (Uses)
        (surfactant in stable fungicidal or herbicidal emulsifiable concentrate)
             THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
(1) American Cyanamid Co; EP 0727141 A 1996 HCAPLUS
(2) American Cyanamid Co; EP 0878128 A 1998 HCAPLUS
(3) Ciba Geigy Ag; WO 9800008 A 1998 HCAPLUS
(4) Hoechst Ag; EP 0407874 A 1991 HCAPLUS
(5) Shell Int Research; EP 0447004 A 1991 HCAPLUS
     220899-03-6
IT
     RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
        (fungicide in stable emulsifiable concentrate)
    220899-03-6 HCAPLUS
RN
     Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6-
CN
     methylphenyl) - (9CI) (CA INDEX NAME)
```

=> b uspatall
FILE 'USPATFULL' ENTERED AT 08:28:14 ON 23 AUG 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)
FILE 'USPAT2' ENTERED AT 08:28:14 ON 23 AUG 2005

CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

```
=> d bib abs fhitstr 166 tot
```

L66 ANSWER 1 OF 1 USPATFULL on STN

AN 2004:83337 USPATFULL

TI Fungicidal use

IN Gewehr, Markus, Kastellaun, GERMANY, FEDERAL REPUBLIC OF

Rose, Ingo, Mannheim, GERMANY, FEDERAL REPUBLIC OF

Muller, Bernd, Frankenthal, GERMANY, FEDERAL REPUBLIC OF

Ammermann, Eberhard, Heppenheim, GERMANY, FEDERAL REPUBLIC OF

Orth, Ann, Langhome, PA, UNITED STATES

Cotter, Henry Van Tuyl, Raleigh, NC, UNITED STATES

PI US 2004063793 A1 20040401

AI US 2003-616950 A1 20030711 (10)

PRAI US 2002-394932P 20020711 (60)

DT Utility

FS APPLICATION

LREP Herbert B. Keil, KEIL & WEINKAUF, 1350 Connecticut Ave., N.W.,

Washington, DC, 20036 Number of Claims: 3

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 352

CLMN

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The use of benzophenones of the formula I ##STR1##

in which

R is hydrogen or C.sub.1-C.sub.4-alkyl and

Hal is fluorine, chlorine or bromine

for controlling Pseudocercosporella herpotrichoides in crop plants is described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 220899-03-6

(as fungicide for controlling Pseudocercosporella

herpotrichoides in crops)

RN 220899-03-6 USPATFULL

CN Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6methylphenyl)- (9CI) (CA INDEX NAME)

=> d bib abs hitrn fhitstr 167 tot

L67 ANSWER 1 OF 7 USPATFULL on STN

AN 2005:137635 USPATFULL

TI Micronized wood preservative formulations

IN Leach, Robert M., Grand Island, NY, UNITED STATES

Zhang, Jun, Getzville, NY, UNITED STATES

PI US 2005118280 A1 20050602

AI US 2004-970446 A1 20041021 (10)

RLI Continuation-in-part of Ser. No. US 2004-821326, filed on 9 Apr 2004,

CLMN Number of Claims: 19 ECL Exemplary Claim: 1

DRWN 8 Drawing Page(s)

LN.CNT 998

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides wood preservative compositions comprising micronized particles. In one embodiment, the composition comprises dispersions of micronized metal or metal compounds. In another embodiment, the wood preservative composition comprises an inorganic component comprising a metal or metal compound and organic biocide. When the composition comprises an inorganic component and an organic biocide, the inorganic component or the organic biocide or both are present as micronized particles. When compositions of the present invention are used for preservation of wood, the micronized particles can be observed as uniformly distributed within the wood and there is minimal leaching of the metal and biocide from the wood.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 220899-03-6, Metrafenone

(micronized wood preservative formulations comprising inorg. metal compds. and organic biocides)

IT 220899-03-6, Metrafenone

(micronized wood preservative formulations comprising inorg. metal compds. and organic biocides)

RN 220899-03-6 USPATFULL

CN Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6methylphenyl)- (9CI) (CA INDEX NAME)

```
L67
    ANSWER 2 OF 7 USPATFULL on STN
       2004:268380 USPATFULL
AN
ΤÌ
       Anthranilamide arthropodicide treatment
       Berger, Richard A, Claymont, DE, UNITED STATES
IN
       Flexner, John Lindsey, Landenberg, PA, UNITED STATES
                                20041021
PI
       US 2004209923
                          A1
                                20040126 (10)
ΑI
       US 2004-485125
                          Α1
       WO 2002-US30302
                                20020910
       US 2001-323941P
                           20010921 (60)
PRAI
DT
       Utility
FS
       APPLICATION
       Linda A Birch, E I du Pont de Nemours and Company, Legal-Patents,
LREP
       Wilmington, DE, 19898
CLMN
       Number of Claims: 23
ECL
       Exemplary Claim: 1
       No Drawings
DRWN
LN.CNT 6453
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

This invention pertains to methods for protecting a propagule or a plant grown therefrom from invertebrate pests comprising contacting the propagule or the locus of the propagule with a biologically effective amount of a compound of Formula I: its N-oxide or an agriculturally suitable salt thereof wherein A and B and R.sup.1 through R.sup.8 are as defined in the disclosure. This invention also relates to propagules treated with a compound of Formula I and compositions comprising a Formula I compound for coating propagules. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 220899-03-6, Metrafenone

(in pesticidal compns. for plant propagation material containing anthranilamides)

IT 220899-03-6, Metrafenone

(in pesticidal compns. for plant propagation material containing anthranilamides)

RN 220899-03-6 USPATFULL

CN Methanone, (3-bromo-6-methoxy-2-methylphenyl) (2,3,4-trimethoxy-6-methylphenyl) - (9CI) (CA INDEX NAME)

L67 ANSWER 3 OF 7 USPATFULL on STN

AN 2003:238511 USPATFULL

TI Fungicidal compositions

IN Leadbitter, Neil, Berkshire, UNITED KINGDOM

PI US 2003166669 A1 20030904

US 6790851 B2 20040914

AI US 2003-258513 A1 20030311 (10) WO 2001-EP4624 20010424

PRAI GB 2000-10198 20000426

DT Utility

FS APPLICATION

LREP SYNGENTA CROP PROTECTION , INC., PATENT AND TRADEMARK DEPARTMENT, 410 SWING ROAD, GREENSBORO, NC, 27409

CLMN Number of Claims: 6

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 542

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention comprises a method of combating phytopathogenic diseases on crop plants which comprises applying to the crop plants or the locus thereof being infested with said phytopathogenic disease an effective amount of a combination of

a) a benzophenone of formula I ##STR1##

wherein

R.sub.1 is methoxy, methyl, hydroxy, acetoxy or pivaloyloxy,

R.sub.2 is C.sub.1-C.sub.4alkoxy or 2-halogenbenzyloxy,

R.sub.3 is C.sub.1-C.sub.4alkoxy,

R.sub.4 is C.sub.1-C.sub.4alkyl, halogen or trifluoromethyl, and

ſ

R.sub.5 is hydrogen, halogen, C.sub.1-C.sub.4alkoxy, trifluoromethyl or nitro;

in association with

b) the strobilurin of formula II ##STR2##

and a composition comprising fungicidally effective amounts of components I and II. and a composition

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

368872-60-0 368872-70-2 368872-71-3

368872-72-4

(synergistic fungicidal compns. containing)

IT 368872-60-0

(synergistic fungicidal compns. containing)

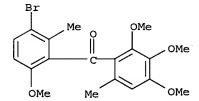
368872-60-0 USPATFULL RN

CN Benzeneacetic acid, $2-[[6-(2-cyanophenoxy)-4-pyrimidiny1]oxy]-\alpha-$ (methoxymethylene)-, methyl ester, (αE) -, mixt. with

(3-bromo-6-methoxy-2-methylphenyl) (2,3,4-trimethoxy-6methylphenyl) methanone (9CI) (CA INDEX NAME)

CM

CRN 220899-03-6 CMF C19 H21 Br O5



CM 2

CRN 131860-33-8 CMF C22 H17 N3 O5 CDES 2:E

Double bond geometry as shown.

ANSWER 4 OF 7 USPATFULL on STN 2002:283305 USPATFULL L67

AN

Fungicidal compositions TI

Leadbitter, Neil, Berkshire, UNITED KINGDOM IN

Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF PA

```
(non-U.S. corporation)
                                20021029
PΙ
       US 6472428
                          B1
       WO 2000072677 20001207
ΑI
       US 2002-979330
                                20020212 (9)
                                20000524
       WO 2000-EP4741
       GB 1999-12219
PRAI
                           19990526
DT
       Utility
       GRANTED
FS
       Primary Examiner: Robinson, Allen J.
EXNAM
LREP
       Gil, Joseph C.
       Number of Claims: 7
CLMN
       Exemplary Claim: 1
ECL
       0 Drawing Figure(s); 0 Drawing Page(s)
DRWN
LN.CNT 473
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A method of combating phytopathogenic diseases on crop plants includes
AB
       applying to the crop plants or the locus thereof being infested with a
       phytopathogenic disease an effective amount of a combination of
       a) (E,E)-\alpha- (methoxyimino)-2-[[[[1-[3 (trifluoromethyl)phenyl]ethyl]]
       idene]amino]oxy]methyl]-benzeneacetic acid methyl ester of formula I
       ##STR1##
        in association with
       b) a benzophenone of formula II ##STR2##
        wherein
       R.sub.1 is hydrogen, halogen, C.sub.1-5alkyl or CF.sub.3;
       R.sub.2 is halogen, C.sub.1-5alkyl or CF.sub.3;
       R.sub.3 is C.sub.1-5alkyl or optionally substituted benzyl; and
       R.sub.4 is C.sub.1-5alkyl.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
TT
     309752-56-5 309752-57-6 309752-58-7
        (synergistic fungicidal composition)
IT
    309752-56-5
        (synergistic fungicidal composition)
RN
     309752-56-5 USPATFULL
     Benzeneacetic acid, \alpha-(methoxyimino)-2-[[[(E)-[1-[3-
CN
       (trifluoromethyl)phenyl]ethylidene]amino]oxy]methyl]-, methyl ester,
       (\alpha E)-, mixt. with (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-
       trimethoxy-6-methylphenyl)methanone (9CI) (CA INDEX NAME)
     CM
          1
     CRN 220899-03-6
     CMF C19 H21 Br O5
```

CRN 141517-21-7 CMF C20 H19 F3 N2 O4 CDES 2:E,E

Double bond geometry as shown.

```
ANSWER 5 OF 7 USPATFULL on STN
L67
AN
       2002:199137 USPATFULL
TT
       Fungicidal combinations
IN
       Dalton, Ian Paul, Sissach, SWITZERLAND
                                20020808
ΡI
       US 2002107246
                          A1
       US 6689776
                          B2
                                20040210
ΑI
       US 2001-997607
                                20011129 (9)
PRAI
                           20000613
       WO 2000-EP5433
       GB 1999-13827
                            19990614
       GB 1999-13826
                            19990614
       GB 1999-13824
                            19990614
       GB 1999-13822
                            19990614
       GB 1999-13820
                            19990614
       GB 1999-13818
                            19990614
       GB 1999-13817
                            19990614
       GB 1999-13816
                            19990614
       GB 1999-13814
                            19990614
       GB 1999-13813
                            19990614
       GB 1999-13812
                            19990614
       GB 1999-13810
                            19990614
       GB 1999-13808
                            19990614
       GB 1999-13807
                            19990614
       GB 1999-13805
                            19990614
       GB 1999-13803
                            19990614
       GB 1999-13798
                            19990614
       GB 1999-13796
                            19990614
       GB 1999-13794
                            19990614
       GB 1999-13792
                            19990614
       GB 1999-13789
                            19990614
       GB 1999-13787
                            19990614
DТ
       Utility
FS
       APPLICATION
       Thomas Hamilton, III, Syngenta Crop Protection, Inc., Patent and
LREP
       Trademark Dept., 410 Swing Road, Greensboro, NC, 27409
CLMN
       Number of Claims: 7
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 663
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The invention relates to a method of combating phytopathogenic diseases
AB
       on crop plants which comprises applying to the crop plants or the locus
       thereof being infested with said phytopathogenic disease an effective
       amount of a combination of
```

a) a benzophenone of formula I ##STR1##

wherein R.sub.1 is methoxy or methyl, R.sub.2 is C.sub.1-C.sub.4alkoxy or 2-halogenbenzyloxy, R.sub.3 is C.sub.1-C.sub.4alkoxy, R.sub.4 is C.sub.1-C.sub.4alkyl, halogen or trifluoromethyl, and R.sub.5 is hydrogen, halogen, C.sub.1-C.sub.4alkoxy, trifluoromethyl or nitro;

in association with

b) a compound selected from the group comprising compounds of formulae II, III, IV, V, VI, VII, VIII, IX, X and XI as described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 220899-03-6D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-12-9D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-62-9D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-68-5D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides

(in synergistic fungicidal combinations)

IT 220899-03-6D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides

(in synergistic fungicidal combinations)

RN 220899-03-6 USPATFULL

CN Methanone, (3-bromo-6-methoxy-2-methylphenyl) (2,3,4-trimethoxy-6-methylphenyl) - (9CI) (CA INDEX NAME)

ANSWER 6 OF 7 USPAT2 on STN L67 AN 2003:238511 USPAT2 TI Fungicidal compositions Leadbitter, Neil, Berkshire, UNITED KINGDOM IN Syngenta Crop Protection, Inc., Greensboro, NC, United States (U.S. PA corporation) US 6790851 PΤ B2 20040914 WO 2001080643 20011101 ΑI US 2003-258513 20030311 (10) WO 2001-EP4624 20010424 PRAI GB 2000-10198 20000426 DT Utility FS GRANTED Primary Examiner: Pryor, Alton N. EXNAM LREP Allen, Rose M. CLMN Number of Claims: 5 ECL Exemplary Claim: 1 DRWN 0 Drawing Figure(s); 0 Drawing Page(s) LN.CNT 501 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The invention comprises a method of combating phytopathogenic diseases ΔR on crop plants which comprises applying to the crop plants or the locus thereof being infested with said phytopathogenic disease an effective

a) a benzophenone of formula I ##STR1##

amount of a combination of

wherein

R.sub.1 is methoxy, methyl, hydroxy, acetoxy or pivaloyloxy,

R.sub.2 is C.sub.1-C.sub.4alkoxy or 2-halogenbenzyloxy,

R.sub.3 is C.sub.1-C.sub.4alkoxy,

R.sub.4 is C.sub.1-C.sub.4alkyl, halogen or trifluoromethyl, and

R.sub.5 is hydrogen, halogen, C.sub.1-C.sub.4alkoxy, trifluoromethyl or nitro; in association with

b) the strobilurin of formula II ##STR2##

and a composition comprising fungicidally effective amounts of components I and II and a composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 368872-60-0 368872-70-2 368872-71-3

368872-72-4

(synergistic fungicidal compns. containing)

IT 368872-60-0

(synergistic fungicidal compns. containing)

RN 368872-60-0 USPAT2

CM 1

CRN 220899-03-6 CMF C19 H21 Br O5

CM 2

CRN 131860-33-8 CMF C22 H17 N3 O5 CDES 2:E

Double bond geometry as shown.

```
L67 ANSWER 7 OF 7 USPAT2 on STN
       2002:199137 USPAT2
ΔN
ТT
       Fungicidal combinations
       Dalton, Ian Paul, Sissach, SWITZERLAND
IN
       Syngenta Crop Protection, Inc., Greensboro, NC, United States (U.S.
PΑ
       corporation)
PΤ
       US 6689776
                          B2
                               20040210
       US 2001-997607
                               20011129 (9)
AΙ
       Continuation of Ser. No. WO 2000-EP5433, filed on 13 Jun 2000
RLI
       GB 1999-13787
                           19990614
PRAI
       GB 1999-13789
                           19990614
       GB 1999-13792
                           19990614
       GB 1999-13794
                           19990614
       GB 1999-13796
                           19990614
       GB 1999-13798
                           19990614
       GB 1999-13803
                           19990614
       GB 1999-13805
                           19990614
       GB 1999-13807
                           19990614
       GB 1999-13808
                           19990614
       GB 1999-13810
                           19990614
       GB 1999-13812
                           19990614
       GB 1999-13813
                           19990614
       GB 1999-13814
                           19990614
                           19990614
       GB 1999-13816
       GB 1999-13817
                           19990614
       GB 1999-13818
                           19990614
       GB 1999-13820
                           19990614
       GB 1999-13822
                           19990614
       GB 1999-13824
                           19990614
       GB 1999-13826
                           19990614
       GB 1999-13827
                           19990614
DT
       Utility
FS
       GRANTED
      Primary Examiner: Pak, John
EXNAM
       Hamilton, Thomas
LREP
       Number of Claims: 9
CLMN
ECL
       Exemplary Claim: 1
DRWN
       0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 633
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The invention relates to a method of combating phytopathogenic diseases
AB
       on crop plants which comprises applying to the crop plants or the locus
       thereof being infested with said phytopathogenic disease an effective
       amount of a combination of
```

a) a benzophenone of formula I ##STR1##

wherein R.sub.1 is methoxy or methyl, R.sub.2 is C.sub.1-C.sub.4alkoxy or 2-halogenbenzyloxy, R.sub.3 is C.sub.1-C.sub.4alkoxy, R.sub.4 is C.sub.1-C.sub.4alkyl, halogen or trifluoromethyl, and R.sub.5 is hydrogen, halogen, C.sub.1-C.sub.4alkoxy, trifluoromethyl or nitro;

in association with

b) a compound selected from the group comprising compounds of formulae II, III, IV, V, VI, VII, VIII, IX, X and XI as described herein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 220899-03-6D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-12-9D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-62-9D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides 220900-68-5D, mixts. with strobilurins, cyanoimidazoles, and carbonic acid amides carbonic acid amides

(in synergistic fungicidal combinations)

IT 220899-03-6D, mixts. with strobilurins, cyanoimidazoles, and

carbonic acid amides (in synergistic fungicidal combinations) 220899-03-6 USPAT2

CN Methanone, (3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6-methylphenyl)- (9CI) (CA INDEX NAME)

RN

=> b caba FILE 'CABA' ENTERED AT 08:38:17 ON 23 AUG 2005 COPYRIGHT (C) 2005 CAB INTERNATIONAL (CABI)

FILE COVERS 1973 TO 3 Aug 2005 (20050803/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

The CABA file was reloaded 7 December 2003. Enter HELP RLOAD for details.

=> d all 152 tot

L52 ANSWER 1 OF 2 CABA COPYRIGHT 2005 CABI on STN

AN 2003:90711 CABA

DN 20033061155

TI New fungicides and strategies for disease control in cereals Nye midler til svampebekaempelse i korn

AU J<o>rgensen, L. N.; Jensen, K. F.

CS Danmarks JordbrugsForskning, Forskningscenter Flakkebjerg, DK-4200 Slagelse, Denmark.

DJF Rapport, Markbrug, (2003) No. 89, pp. 289-298. 6 ref.
Publisher: Danmarks JordbrugsForskning. Tjele
Price: Bulletin article; Conference paper
Meeting Info.: 20th Danish Plant Protection Conference 'Cereal, potatoes, pests, environment and posters', February 2003.

ISSN: 1397-9884 CY Denmark

DT Journal

LA Danish

SL English

ED Entered STN: 20030606

Last Updated on STN: 20040216

Several new fungicides have been tested in Denmark during the last few years. Some of these products have now been authorized but several are still waiting for a registration. Most of the products have been granted a biological approval by the Danish Institute of Agricultural Sciences (DIAS) based on GEP trials data provided by the institute and in some cases supported by GEP data provided by the chemical companies. Proline (prothioconazole) is a promising new ergosterol inhibitor, which has given very effective control on Rhynchosporium (Rhynchosporium secalis), net blotch (Drechslera teres [Pyrenophora teres]), and Septoria diseases (Septoria tritici [Mycosphaerella graminicola] and Stagonospora nodorum). The product is also known to give good control of Fusarium diseases. The product is not yet registered in Denmark. Juventus 90 (metconazole) has been tested in a different formulation to the one which was authorized in 2002. The product has generally given good control of Septoria and rust

diseases in wheat. In 2002 the product was also seen to control Fusarium ear blight in line with Folicur [tebuconazole]. Juventus is mainly seen as a tank mix partner to strobilurins. BAS 560 (metrafenone) is a specific mildewcide, which has given a high and long-lasting effect on mildew in both barley and wheat (Blumeria graminis [Erysiphe graminis]). The product is known to have effect on eyespot (Pseudocercosporella herpotrichoides) although the efficacy in Danish trials so far has been relatively low, but in line with Unix [cyprodinil]. The product is not yet registered in Denmark. Comet (pyraclostrobin) and Opera (pyraclostrobin+epoxiconazole) have both given a very high and broad control of most cereal diseases. In particular the effect on Septoria diseases and tan spot (Drechslera tritici-repentis [Pyrenophora tritici-repentis]) has been better compared with other products. The products have, used at gs. 39, given a very good and long-lasting effect on diseases in wheat, indicating greater flexibility in timing due to better curativity compared with other strobilurins. Pyraclostrobin was authorized in 2002, but epoxiconazole is not authorized. Acanto (picoxystrobin) has been tested and granted biological approval for all major diseases in cereal. Particularly on barley diseases the product has provided a very high level of efficacy. As regards diseases in wheat the product has been very similar to Amistar [azoxystrobin] although the effect on tan spot has been found to be considerable higher. The product is not yet registered in Denmark.

- CC FF005 Field Crops (New March 2000); FF610 Viral, Bacterial and Fungal Diseases of Plants (New March 2000); HH405 Pesticides and Drugs; Control (New March 2000); HH420 Pesticides and Drugs; Chemistry and Formulation (New March 2000)
- SC OQ; 6T; OM; CA; PE; CR
- GT Denmark
- BT Scandinavia; Northern Europe; Europe; Developed Countries; European Union Countries; OECD Countries; Deuteromycotina; Eumycota; fungi; Pyrenophora; Drechslera; Erysiphe; Erysiphales; Ascomycotina; Hordeum; Poaceae; Cyperales; monocotyledons; angiosperms; Spermatophyta; plants; Mycosphaerella; Dothideales; Pseudocercosporella; Rhynchosporium; Stagonospora; Triticum
- CT barley; cereals; chemical control; ergosterol; formulations; fungal diseases; fungicides; metabolic inhibitors; plant disease control; plant diseases; plant pathogenic fungi; plant pathogens; proline; wheat; tebucanazole
- ST Coelomycetes; Drechslera tritici-repentis; epoxiconazole; Hyphomycetes; Phaeosphaeria; Phaeosphaeria nodorum; Phaeosphaeriaceae; prothioconazole; pyraclostrobin; Stagonospora nodorum; strobilurin; metconazole; metrafenone; cyprodinil; picoxystrobin; azoxystrobin
- RN 57-87-4; 147-85-3
- ORGN Drechslera; Erysiphe graminis; Hordeum vulgare; Mycosphaerella graminicola; Pseudocercosporella herpotrichoides; Pyrenophora teres; Pyrenophora tritici-repentis; Rhynchosporium secalis; Stagonospora; Triticum; Triticum aestivum; Leptosphaeria nodorum
- L52 ANSWER 2 OF 2 CABA COPYRIGHT 2005 CABI on STN
- AN 2003:71459 CABA
- DN 20033037268
- TI Common names of pesticides recently approved by the BSI
- AU Walker, S. B.
- CS BARK Information Services, Stainmoor House, Kirkby Malzeard, Ripon, N Yorks HG4 3QL, UK.
- SO Pest Management Science, (2003) Vol. 59, No. 3, pp. 371-373. Publisher: John Wiley & Sons. Chichester ISSN: 1526-498X
- CY United Kingdom
- DT Journal
- LA English
- ED Entered STN: 20030502 Last Updated on STN: 20030502
- AB This paper provides the common names, chemical names and chemical structures of one acaricide (amidoflumet), 4 fungicides (dimoxystrobin,

metrafenone, nicobifen and tiadinil), 5 insecticides (flonicamid, flufenerim, noviflumuron, pyridalyl and thiosultap) and 2 herbicides (cyflufenamid and metamifop) recently approved by the Technical Committee AW/81 of the British Standards Institution. These names have also been approved as provisionally adopted International Standards Organization names. The chemical name provided for each pesticide is the IUPAC name. HH400 Pesticides and Drugs (General)

SC OW; OM; OE; CA; PE

CT acaricides; chemical structure; fungicides; herbicides; insecticides; ISO ST amidoflumet; cyflufenamid; dimoxystrobin; flonicamid; flufenerim; metamifop; metrafenone; nicobifen; noviflumuron; pyridalyl; thiosultap; tiadinil

=> b home FILE 'HOME' ENTERED AT 08:38:25 ON 23 AUG 2005